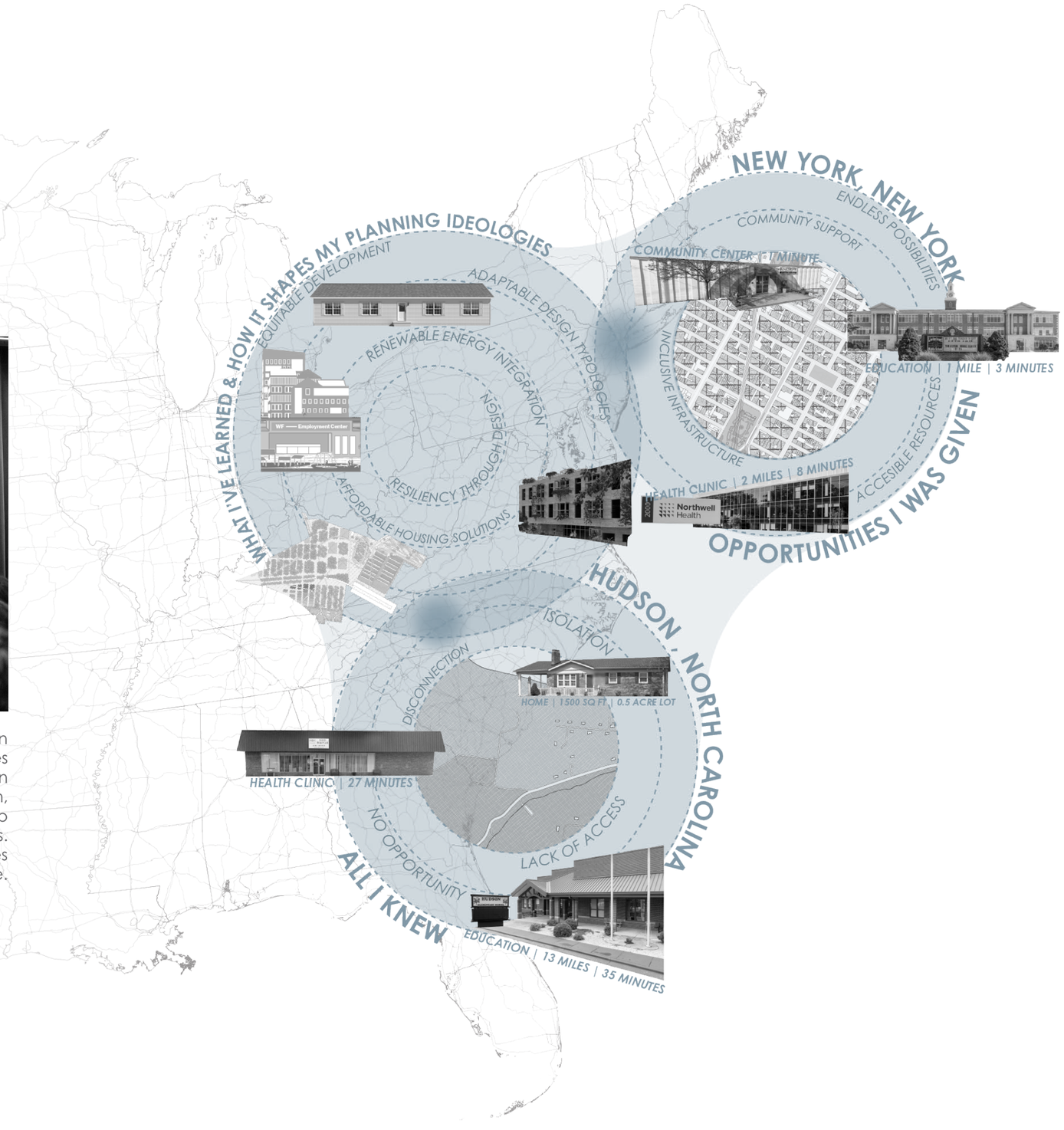
# kendal eastwood m.

selected works | **2022 - 2024** | architecture & planning

# Hi!

My name is Kendal Eastwood.


Growing up in a rural town, I experienced firsthand the consequences of limitation of space and opportunity, which sparked my passion for planning cities and spaces that foster belonging and empowerment. My architectural studies have focused on addressing issues like social isolation, affordable housing, and community-driven design, informing my design ideologies. I am particularly interested in reimagining land ownership models to restore agency and economic empowerment for vulnerable communities. With a deep commitment to sustainable urban planning, I aim to design inclusive cities that blend social equity and environmental sustainability to create lasting change.




NOMA BGL Student Design Competition Award | 2024

Urban Design Competition Exhibition Boards | 2024

Future Learning Community Engagement Project | 2023

AU Exhibition Construction | 2024

Future Learning Community Engagement Project | 2024

AIAS Quad Conference | NYIT Executive Board 2022

Site Visits and Stakeholder Engagement | 2024

AIAS "Pie a Peer" Fundraiser | 2023



Gensler *Bronx Link* Presentation | 2024

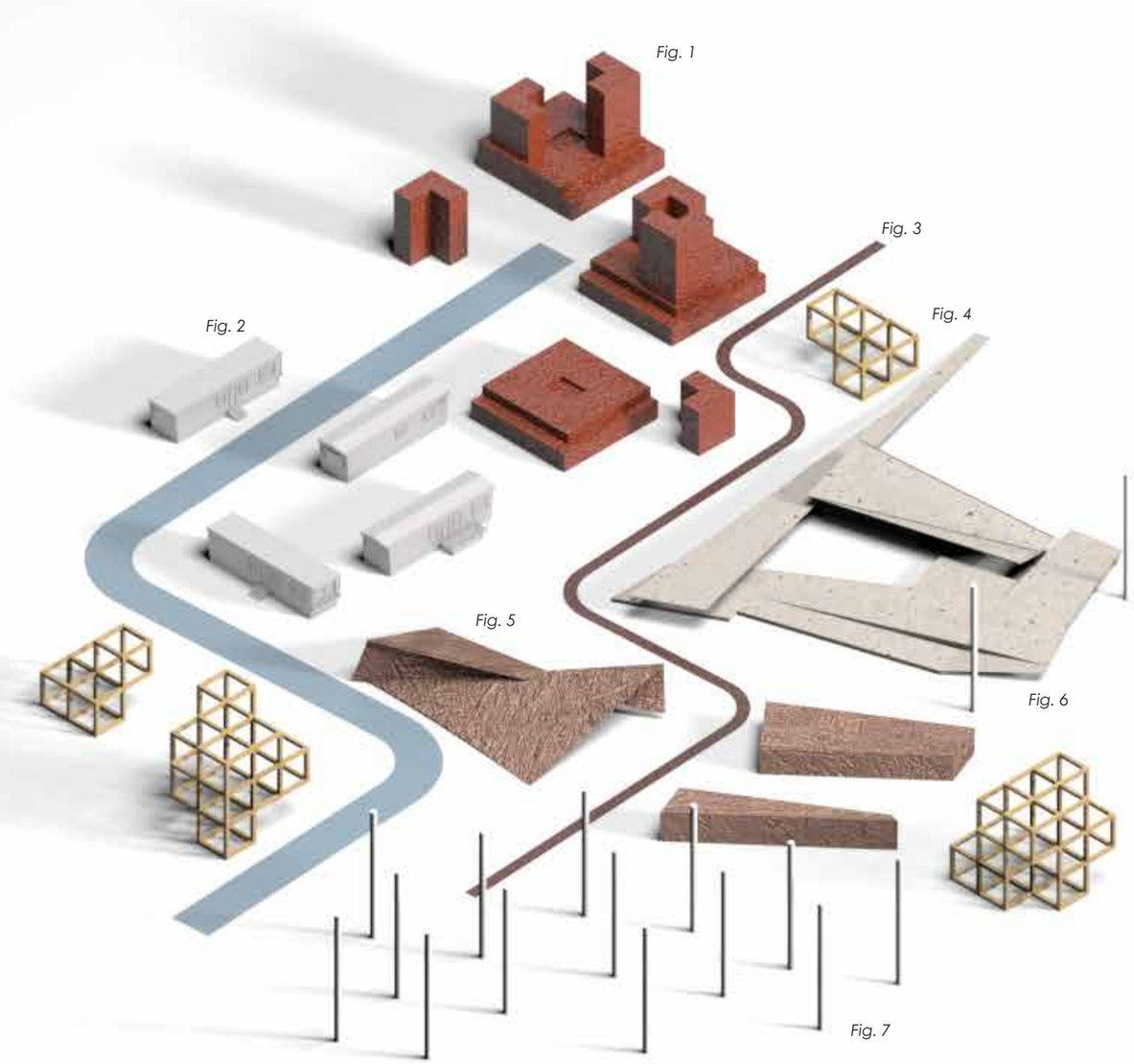
AIAS Grassroots | NYIT Executive Board 2022

Fourth Year Final Presentation | 2024

NOMA Exchange | Conference 2024

NYIT SOAD AIA LI Lecture Event | 2023


AIAS Engagement Fair | 2022




## ACADEMIC

**1** *How can we implement an afforable housing solution in West Farms?*

**West Farms Community Land Trust+**

**2** *How can ownership play a role in providing lasting bonds and resilience for vulnerable communities?*

**The Collective Act of Reclaiming Home**

**3** *How can we reclaim the future of West Baltimore through art, culture, and community?*

**Threads of Healing**

**4** *How can biophilic design be used as a tool to enhance the experience of a space?*

**Clinton Hill Library**

**5** *How can design promote cultural learning and exchange through shared trauma?*

**Collision on President Street**

## PROFESSIONAL

**6** *How can a city reconnect to its river through the paradigmatic infrastructural decking of a highway?*

**Fastscape & Slowscape**

**7** *How can community-based design foster synergies between energy production, ecology, and the economy?*

**Productive Frictions: E3**

## FABRICATION

**8** *How can physical fabrication be used to communicate ideas to a wider audience?*

## TABLE OF CONTENTS

*How can we implement an afforable housing solution in West Farms?*

# West Farms Community Land Trust+

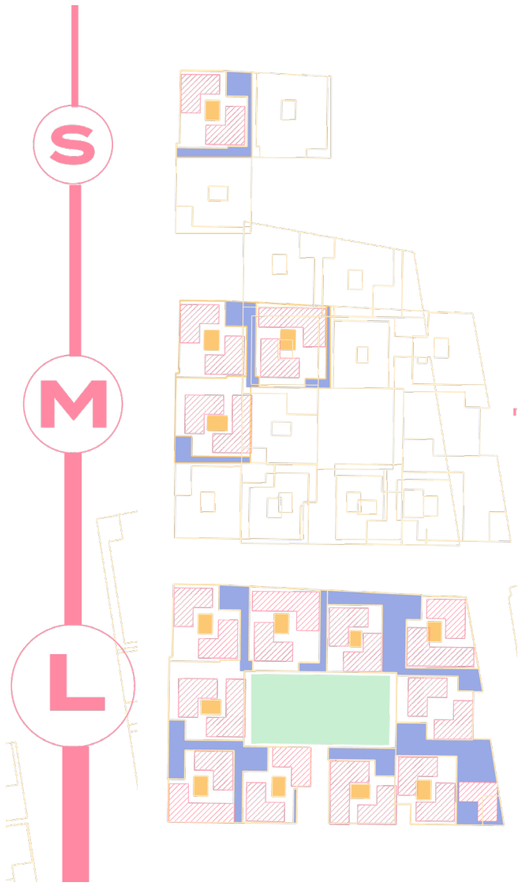
**Urban Design Studio Competition Winner**

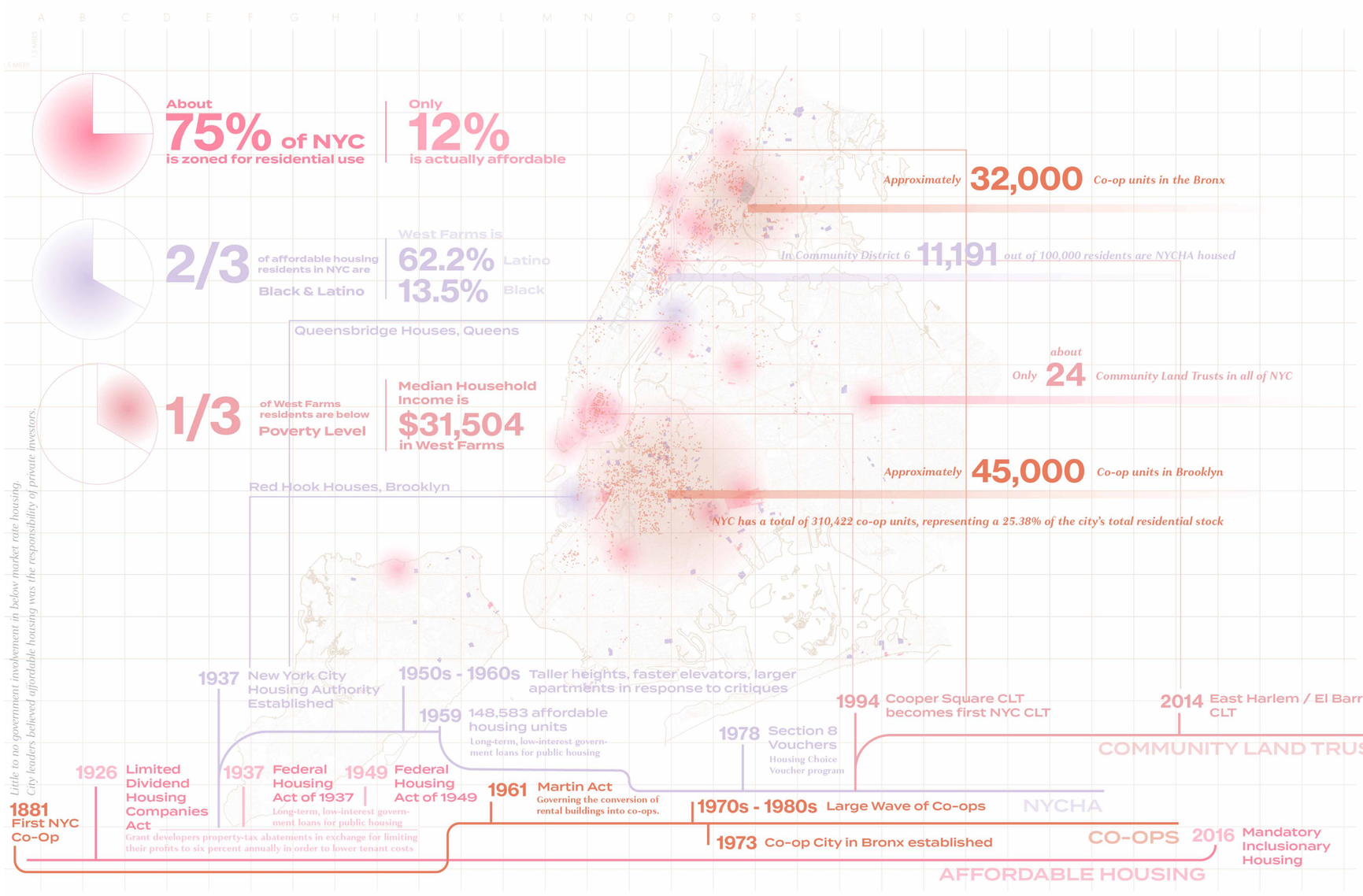
**AIAS 2024 Project Excellence Award Winner**

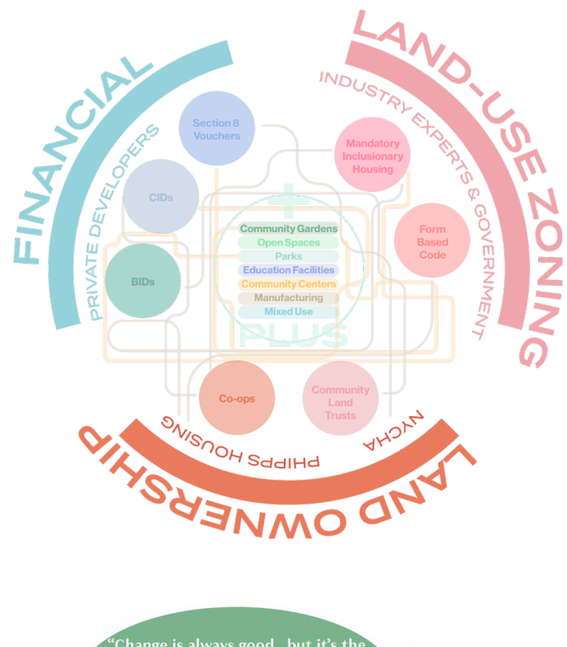
**Metropolis 2024 Planet Positive Awards Best Student Work Honorable Mention**

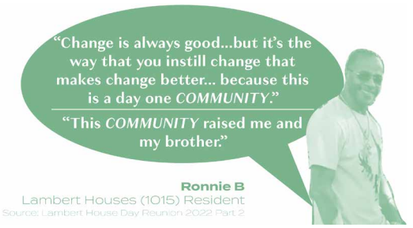
**Instructor:** Evan Shieh
**Team:** Elise Park
**Contribution:** Research, Design Studies, Visual Representation and Post Production, Model Fabrication
Spring 2024

The West Farms Community Land Trust+ utilizes a community land trust (CLT) model to address affordable housing, through empowering residents and fostering a solidarity economy. Despite NYC's housing initiatives, affordability remains a challenge, especially in West Farms where many live below the poverty line. This project aims to provide affordable housing and community amenities while restoring community agency. Through a synthesis of research, the West Farms CLT+, which is designed as an adaptable model for any location, is developed to create diverse housing options and provides the opportunity to give agency back to the community and promote community engagement.





New York City has a storied history of affordable housing and performative housing models. However, none of these individual models have "solved" the crises of attainable and affordable housing. Prior to 1926, there was no government intervention of below rate housing, as they believed it was an issue for private developers to address. As housing acts and the rise of organizations like NYCHA came into the picture, NYC slowly became more and more aware of the need for obtainable housing, with ownership models like co-ops, and more recently CLTs rethinking how to integrate community into housing.

# What is a CLT?

## BACKGROUND

In light of widening **racial disparities** in homeownership, worsened by private equity's growing role in housing and policy **failures to address historical discrimination,** there's an **urgent need for strategies promoting equitable land ownership and wealth-building for low-income communities of color.** One increasingly prevalent strategy is the **Community Land Trust (CLT)**, a nonprofit acquiring and managing land and buildings for lasting affordability and community control. The pioneering CLT, New Communities, established in 1969 to support black farmers, stemmed from collaboration among farmers and civil rights activists, including members of the Student Nonviolent Coordinating Committee (SNCC).

## A NEW TYPE OF LAND OWNERSHIP

A **Community Land Trust (CLT)** is a nonprofit organization that acquires and manages land to **ensure lasting affordable housing and community oversight.** What sets CLTs apart is their separation of land ownership from housing ownership and **governance by community members.** In the typical model, CLTs acquire land to develop affordable housing and community facilities. Homes are sold below market rates to low- and moderate-income families, with the land leased for the long term. Resale restrictions are imposed to **maintain affordability for future buyers.**

Currently, there are **approximately 220 community land trusts in the United States**, providing an estimated **10,000 to 15,000 homeownership units** and nearly **20,000 rental units.**

# Who Does a CLT Serve?

A Community Land Trust (CLT) typically serves a **range of groups** within a community, particularly those who may face challenges related to housing affordability and access to land. **These groups may include:**

01 **Low-income families and individuals:** CLTs often prioritize providing affordable housing options for those with limited financial means.

02 **Working-class individuals and families:** Many CLTs aim to support individuals and families who may have moderate incomes but still struggle to afford housing.

03 **Marginalized communities:** CLTs may focus on serving marginalized groups such as minorities, immigrants, refugees, and people with disabilities.

04 **Young adults and students:** CLTs may offer housing solutions tailored to the needs of young adults, students, and first-time homebuyers.

05 **Seniors and retirees:** CLTs may develop housing specifically designed to meet the needs of seniors and retirees, including accessible and age-friendly accommodations.

06 **Artists and cultural workers:** Some CLTs prioritize providing affordable live-work spaces for artists, musicians, and other cultural workers.

The specific groups served by a CLT can vary based on factors like the organization's mission, local community needs, and available resources. Nevertheless, the **overarching aim is to foster inclusive and equitable housing solutions that benefit a diverse range of community members.**

# Key Considerations!

Cities can support Community Land Trusts (CLTs) by **funding affordable housing** and **partnering with lenders** to promote CLT homeownership, therefore helping to **overcome financial barriers and promote CLTs** as an affordable housing solution.

**CLTs vary in size and purpose**, shaped by factors like founder **intent**, local **needs**, and **market dynamics**. By considering these factors, CLTs can tailor their scope and objectives to **meet community needs**.

**Cities can help educate stakeholders about CLTs**, clarifying the merits and unique structure to address confusion among prospective residents and lenders due to the unconventional ownership model and resale price restrictions.

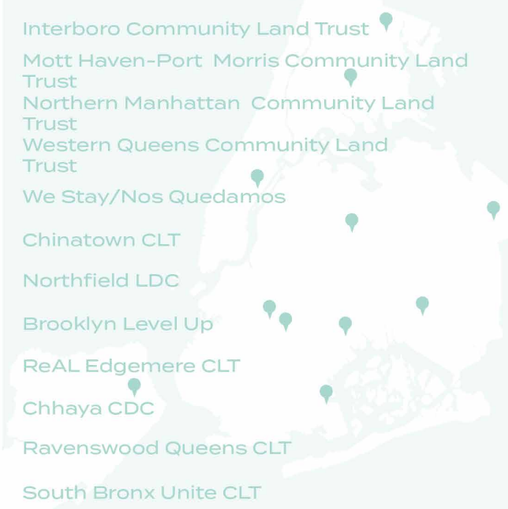
The governing structure typically features a **tripartite board**, comprising **CLT residents, community members, and public representatives** or experts. This **balanced representation** ensures accountability, diversity of perspectives, and effective decision-making.

While CLTs typically focus on **housing development**, they can also extend their scope to include **agricultural, nonprofit, or commercial projects.**

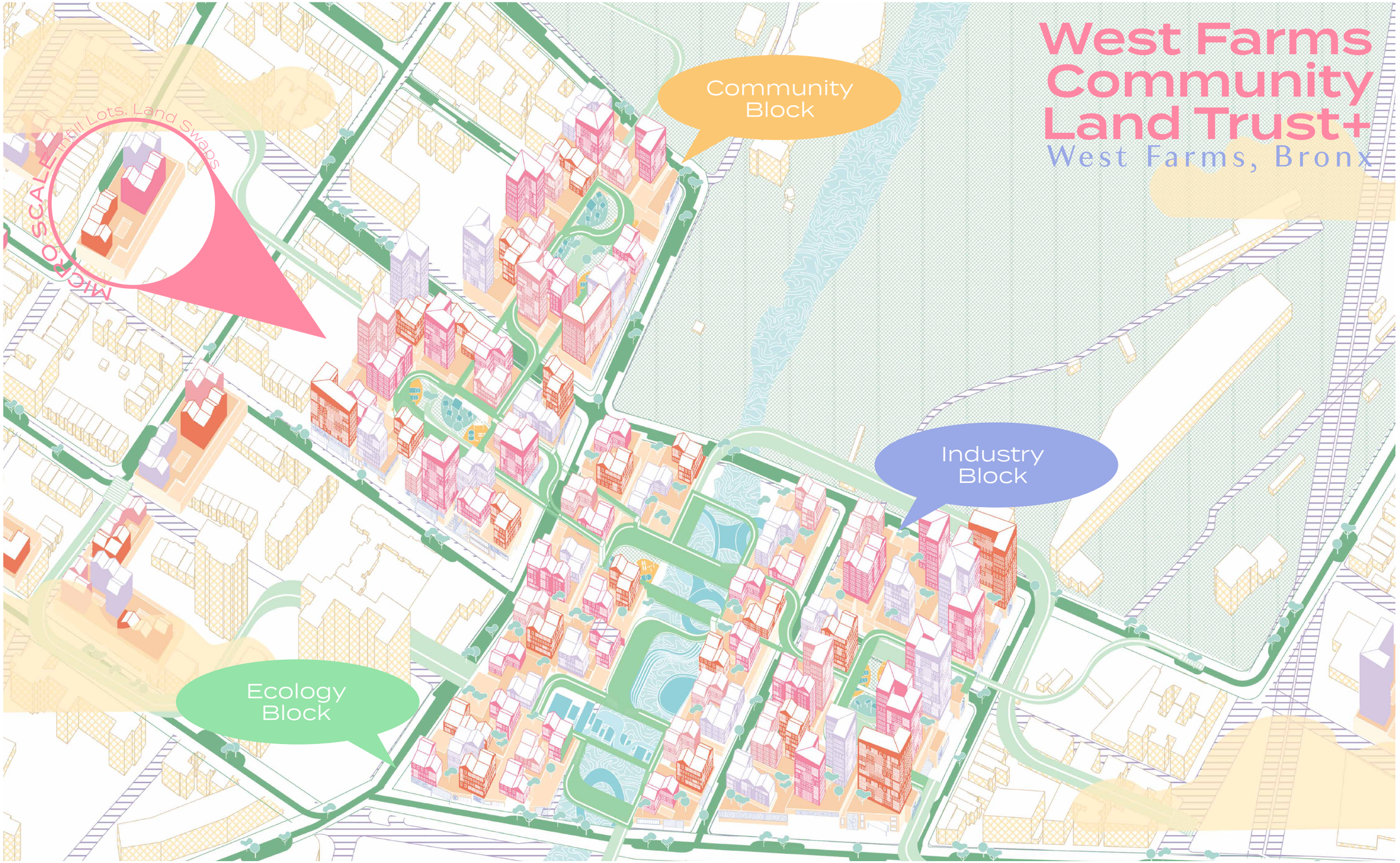
# Where are CLTs Working?

## Established Community Land Trusts in New York City:

- Bronx Community Land Trust
- Brownsville Community Land Trust
- Cooper Square Community Land Trust
- East Harlem/El Barrio Community Land Trust
- East New York Community Land Trust
- Interboro Community Land Trust
- Mott Haven-Port Morris Community Land Trust
- Northern Manhattan Community Land Trust
- Western Queens Community Land Trust
- We Stay/Nos Quedamos
- Chinatown CLT
- Northfield LDC
- Brooklyn Level Up
- ReAL Edgemere CLT
- Chhaya CDC
- Ravenswood Queens CLT
- South Bronx Unite CLT

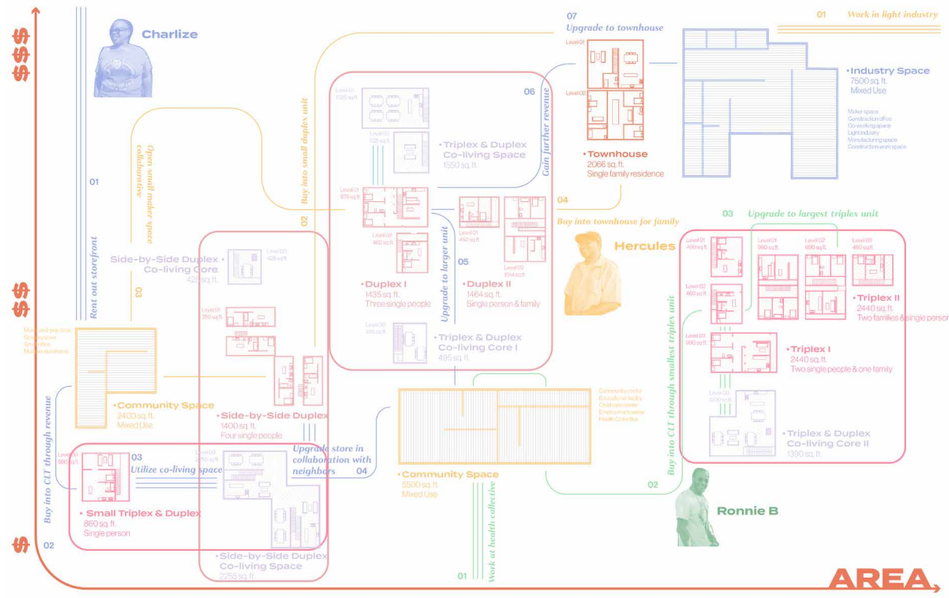


**For more information on operating CLTS in NYC, scan the QR code below:**




Research and design principles are manifested into a set of rules that created opportunities for community interaction. The L-shaped buildings create the perfect cove for a shared courtyard and the spaces between each block creates a set of multiple medium sized courtyards that then feed into the largest courtyard, allowing for all buildings to find a sense of community within their CLT.

How can we implement an afforable housing solution in West Farms?




Giving various options in this manner allows families and individuals to hold autonomy in which kind of environment they intend to exist within. It was important to propose a large variety of unit areas, to cater to different types of families and individuals that may find themselves needing different things.

**Charlize**

**01.** Rent out a storefront
**02.** Buy into CLT through revenue from storefront
**03.** Move into the small duplex unit and utilize co-living space
**04.** Upgrade and expand store in collaboration with community members met through the co-living space
**05.** Upgrade to larger duplex unit
**06.** Business is successful; gain further revenue
**07.** Upgrade to townhouse, allowing for family to live together in one large home.

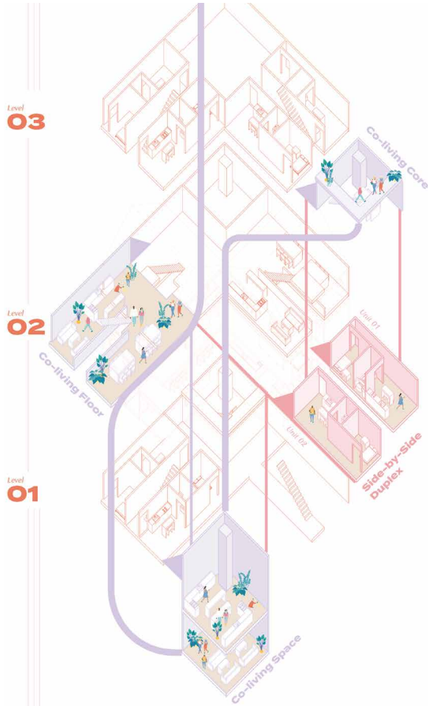


**Hercules**

**01.** Work in light industry space
**a2.** through small duplex unit
**03.** Open small maker space collaborative to gain revenue and financial independence
**04.** Upgrade unit into townhouse for family

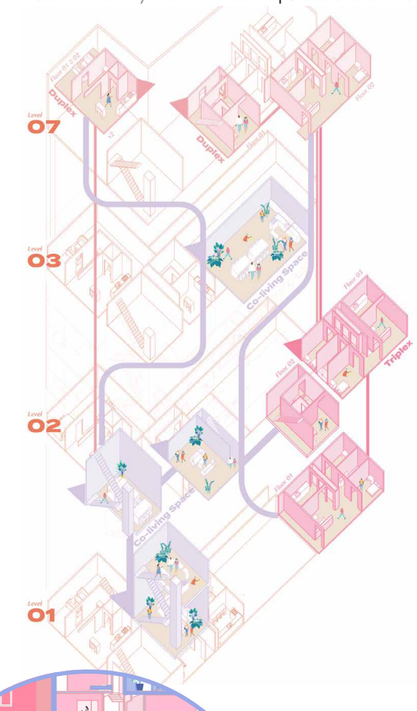
**Ronnie B**

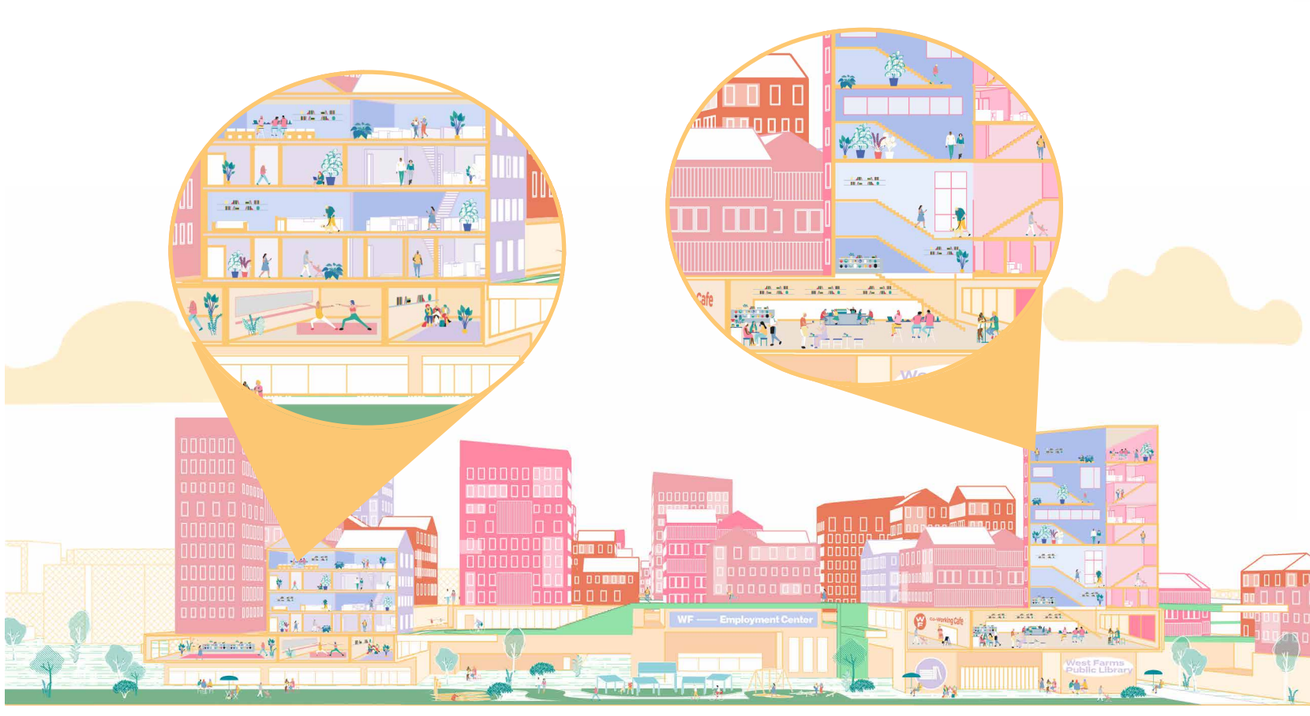
**01.** Work at the health collective
**02.** Buy into CLT through the smallest triplex unit, utilizing co-living space
**03.** Upgrade to largest triplex unit without need for co-living space



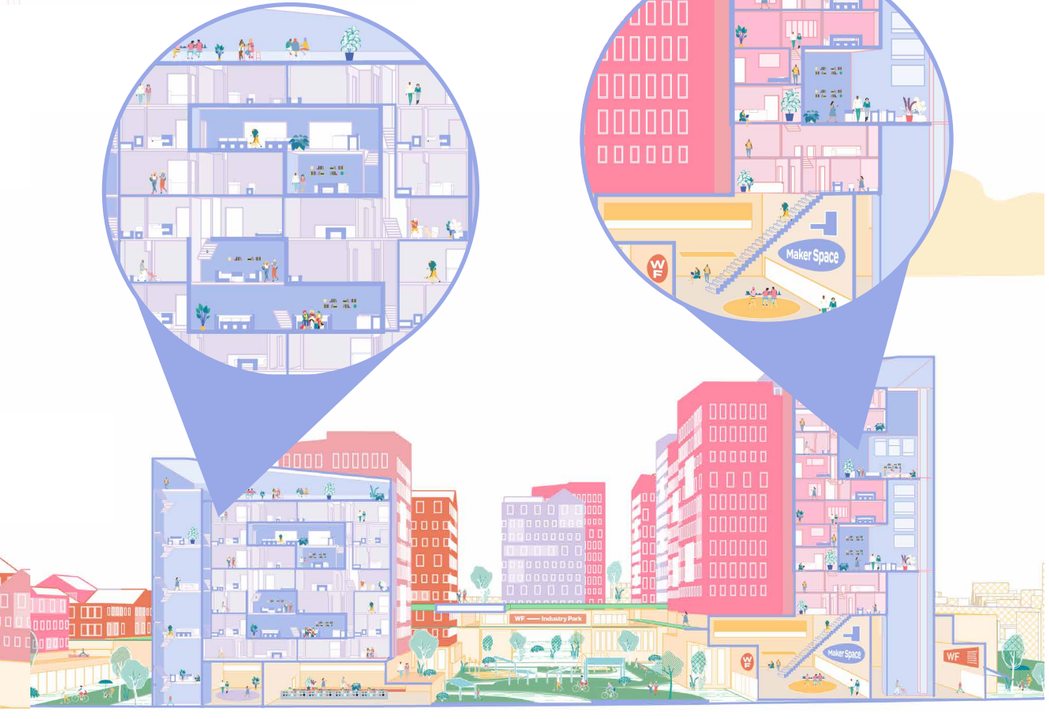

The units implemented in the CLT structure are townhouses, side-by-side duplexes, duplexes and triplexes. These different units are hybridized throughout each of the housing structures and creates the opportunity for co-living spaces within each building, which communicates strongly with the community courtyards added in the plus layer. Each of the different housing units creates the opportunity for varying circulation methods like walk-up, single stair and circulation core.

The use of co-living spaces were integral in the creation of this new typology, as it creates a sense of community and a high level of interaction between CLT residents, which is so important in allowing for a sense of community.




The community block has a mixed density of housing that sits along a variety of community based storefront spaces like schools, libraries, community centers and more.




The industry zone has higher density housing that sits along larger span pedestal storefront zones and focuses on maker spaces, light industry zones, and more.

# PHILLIP

PHIPPS HOUSES PRESIDENT & CEO

*BEFORE WEST FARMS COMMUNITY LAND TRUST+...*

PHILLIP, PRESIDENT OF **PHIPPS HOUSES**, HAS ONE GOAL:

PROVIDING AFFORDABLE HOUSING FOR THE RESIDENTS OF **WEST FARMS.**

HOWEVER, RESIDENTS FEEL THAT THEY LACK **COMMUNITY OWNERSHIP** AND **AGENCY.**

AFTER HEARING THEIR CRITIQUES, PHILLIP WANTS TO FIND WAYS TO HELP CHANGE WEST FARMS FOR THE BETTER.

PHILLIP LOOKS INTO RECTIFYING THE ISSUE AND FINDS AN ARTICLE ON **COMMUNITY LAND TRUSTS (CLT).**

HE PITCHES CLTS TO HIS TRUSTEES AND GETS COMMUNITY MEMBERS INVOLVED.

PHIPPS DECIDES THEY CAN STRUCTURE OWNERSHIP THROUGH A CLT, PROVIDING RESIDENTS WITH **CHEAPER HOUSING** AND **STAKE** IN THE AMENITIES ON EACH LOT.

**PHIPPS NEIGHBORHOODS** BECOMES ESTABLISHED IN THE HEART OF THE CLT, CREATING INITIATIVES AND EVENTS TO PROMOTE **COMMUNITY AGENCY.**

COMING SOON: PHIPPS

AS STOREFRONTS AND HOUSING BECOME POPULATED, WEST FARMS BECOMES A PLACE BUILT **BY** AND **FOR** THE COMMUNITY.

PHIPPS NEIGHBORHOOD

JOIN OUR COMMUNITY EVENTS!

THANKS!

DELI & GROCERY

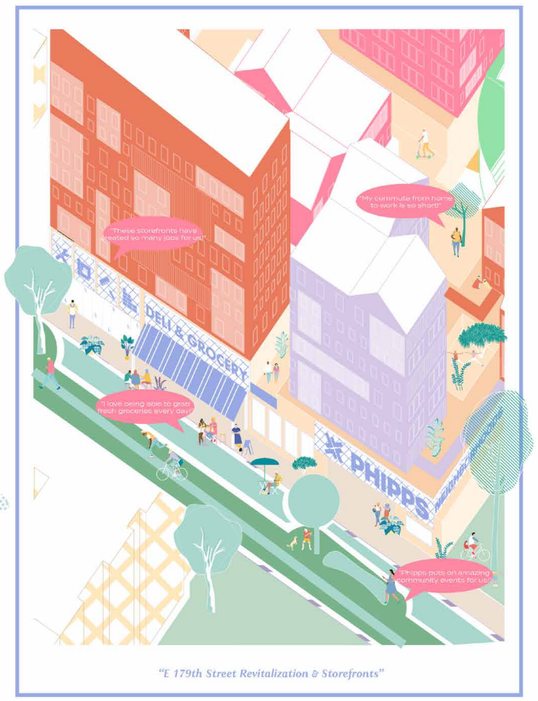
PHIPPS

424

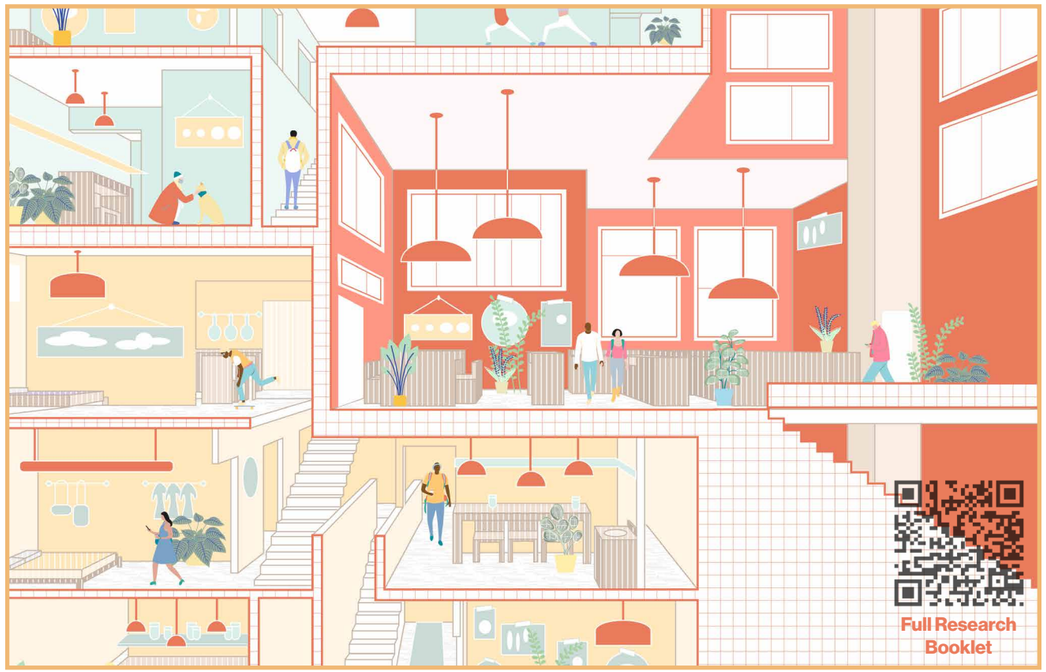
WEST FARMS COMMUNITY PUBLIC SCHOOL

PHILLIP IS FULFILLED IN KNOWING HE HAS PROVIDED AN AFFORDABLE, EQUITABLE, AND HOPEFUL FUTURE FOR THE WEST FARMS COMMUNITY!


*"Community Courtyard"*




*"E 179th Street Revitalization & Storefronts"*

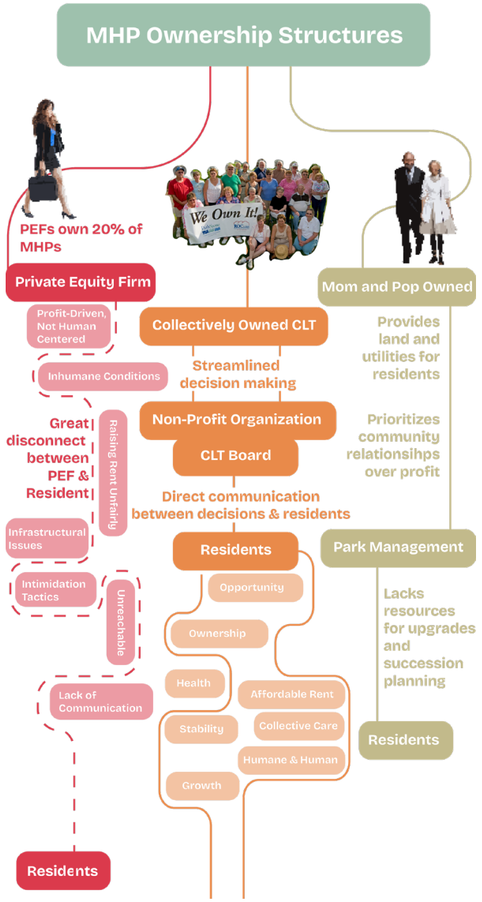


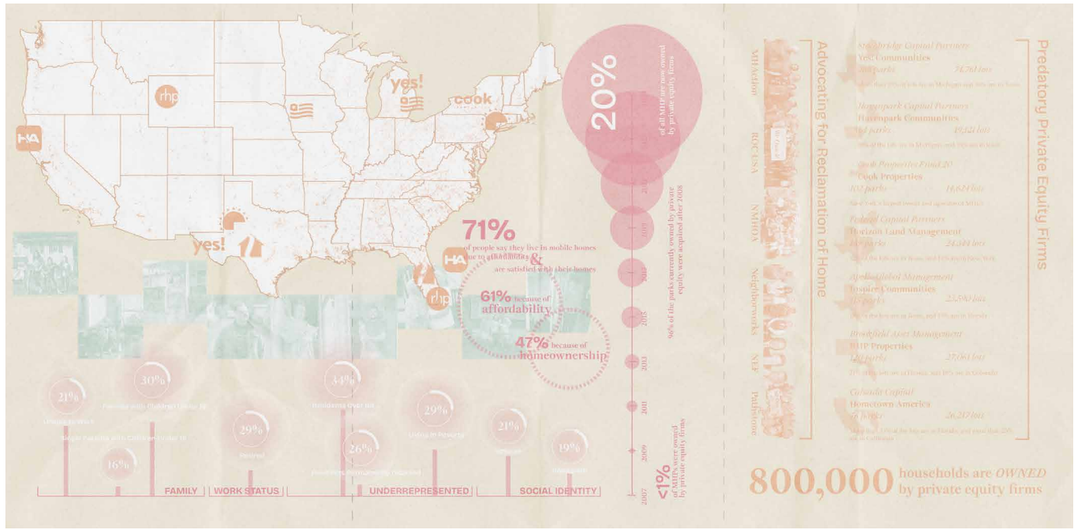
*How can ownership play a role in providing lasting bonds and resilience for vulnerable communities?*

# The Collective Act of Reclaiming Home

**Instructor:** Victoria Vuono
**Team:** Elise Park
**Contribution:** Research, Design, Visual Representation and Post Production
Fall 2024

Reclaiming Home examines how collective land ownership in manufactured home parks can provide affordable, stable housing rooted in autonomy and community, empowering residents without the fear of displacement. The diverse community includes single-income households, veterans, immigrants, retirees, and disabled individuals, all vulnerable to being priced out by corporate developers using intimidation tactics. Through four case studies—land ownership and displacement, rural communities, disaster-affected residents, and those at risk of homelessness—the thesis highlights widespread issues affecting marginalized groups. It explores the potential for land ownership models that prioritize tenants, fostering autonomy, stability, and community resilience. By supporting incremental building, such models promote well-being and social interaction, offering residents a genuine sense of home and upward mobility.




## Case Study: Mission Bay Mobile Home Park
## Issue: Natural Disasters & Environmental Issues

Open Spaces

Flood Plains

Community Notes

- residents required to field costs related to flooding even with fixed income
- poor foundation construction
- leads to flooding of homes
- gas leaks due to poor maintenance
- lack of communication with owner over issues
- disproportionate land value due to flood plain
- allows for predatory PEFs to obtain cheap land to situate MHPs for a quick profit

$3 million **5.7 acre** outside of flood plain

$3 million **0.5 acre** outside of flood plain

**S [Strengths]**

**Community Atmosphere:** Since it operates as an age restricted community, residents share commonalities and shared interests in the happenings of the park

**Amenities:** Offers a well-maintained community with features such as a clubhouse, swimming pool, fitness center, library, and more, promoting an active lifestyle, though they have been restricted due to new ownership

**W [Weaknesses]**

**Older Infrastructure:** Established in 1971, some residents may find infrastructure and facilities outdated compared to newer communities

**Lot Rent Variability:** Rent variability between $800 and $1,600 could create financial unpredictability for residents

**O [Opportunities]**

**Community Enhancements:** Expanding recreational offerings or hosting more community events could further attract active retiree

**Sustainability Initiatives:** Introducing eco-friendly initiatives like solar panels or water conservation measures could reduce utility costs and appeal to environmentally conscious buyers

**T [Threats]**

**Cost of Living Increases:** Rising rents and HOA fees could deter long-term residency, especially in a high-cost area like the Bay Area

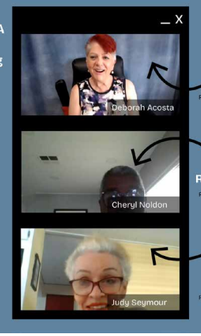
**Competitive Housing Market:** Competition from newer or more modern senior living communities could impact resident retention and growth

**MHAction / MBRA San Leandro Planning Meeting Minutes**

Oct. 3rd, 2024

*Key Takeaways*

Park Challenges: Mission Bay faces significant challenges: rising rents, flooding risks, and unresponsive management
Upcoming Meeting:
Upcoming city council meeting on Oct 22nd to discuss citywide rent stabilization ordinance, critical for residents to attend
MH Action Work: MH Action continues expanding work across California, addressing various mobile home community issues




"The flood had actually reached the front of my house and was at least a foot up."

**Flooding Issues**
Resident of Mission Bay Mobile Home Park
Former CEO of the City of San Leandro
Advocate for Seniors in the Bay Area

"I've been here six years, my rent went from $800 to 1,300."

**Raising Rent Concerns**
Resident of Mission Bay Mobile Home Park
MBRA Park Committee
Advocate for Seniors in the Bay Area

"They did not pay for any of the damage to any of our homes- they denied responsibility."

**Ownership Disputes**
Resident of Mission Bay Mobile Home Park
MBRA Park Committee
Advocate for Seniors in the Bay Area

## Case Study: Akron Mobile Home Park
## Issue: Land Ownership & Displacement

Low-Income Zones

Open Space

akron mobile home park situated in a low income zone

Community Notes

cook

private equity firm that owns all housholds in akron mobile home park

**2017**
Akron Mobile Home Park sold to Sunrise Capitol Investors (SCI) a private equity firm based in Florida.

SCI immediately attempted to raise rent 60%

**2018**
Tenants began to "push back" against rent increases.

First win against rent increases was due to SCI illigally incresing rent 2x in less than a year.

**2019**
75% of residents held their rent for 8 months - first successful rent strike in the US.

The park worked with legislatures and assembly people in NYS to get rent raises capped at 3% for all MHP residents.

Residents worked w/ Rock USA to put an offer in for park.

**2020**
Resident offer rejected, SEI sold park to Cook Properties, the largest private equity firm in NYS.

**2021**
Cook found a "loop hole" to charge residents a 6% annual increase in all 102 of their mobile home parks.

**2023**
Tenants have been in legistation with 2 lawsuits against Cook Properties against 6% increase.

**S [Strengths]**

**Community Care:** Solid foundation and coalition building has already taken place, strong emphasis on collective and communal care for all neighbors

**Affordable Housing Contribution:** The park provides a much-needed affordable housing option in the Akron area, where economic recovery is ongoing, and housing affordability is crucial

**W [Weaknesses]**

**Design and Layout Challenges:** Challenges in meeting both regulatory requirements and community expectations for spacing and density

**Ownership Disputes:** Uncertain ownership and rent disagreements; unclear future for residents at large

**O [Opportunities]**

**Reclaiming Ownership:** Restructuring of predatory ownership to community land trust ownership model, providing affordable and equitable prices and maintenance

**Economic Boost:** Solidarity economy through the provision of jobs within the park and community to foster a self sustaining community rooted in healthy, communal values

**T [Threats]**

**PEF Opposition:** Strong opposition from Cook Properties, loopholes to allow them to stay in power

**Lack of Organization:** Uncertainty in public perception of plan, requires great planning and general agreement to allow for this new model

**On Cook Properties' Purchase of the Park**

"Ever since Cook Properties purchased the park there has been consistent problems."

"They bully and scare residents out of their homes."

**On Cook Properties' Rent Increase**

"We need control so that residents can live comfortably and still own their home."

**On Rent's Adverse Effect on Residents' Wellbeing**

"When rent becomes too expensive to afford, we have been seeing people not being able to afford their medication, or no being able to afford groceries."

**On Her Dream**

"Having a place to call home thats beautiful, well maintained, affordable, and feasible for all family types would be my dream."

"In these days we are like a family."

**Maribeth Sheedy**

Akron Mobile Home Park, Akron NY :a
maribethsheedy@1stprioritymortgage.com :e
123.456.7890 :p

President of Tenants Association in Akron, NY
Advisory Board Chairman for MHAction
Works Full Time in Mortgage Industry
Mother

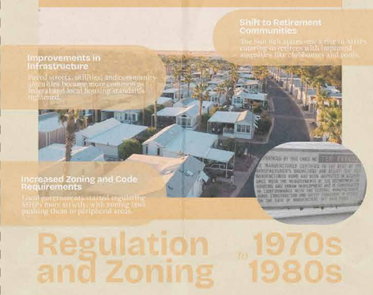
## Post-WWII Expansion to 1940s 1960s


**1920s**
Mobile homes, initially known as "travel trailers" and "auto-campers," gain popularity in the United States.

**1940-50s**
Due to rapid post-war population growth and increased demand for affordable housing, mobile homes become a significant source of permanent single-family housing, leading to the development of mobile home parks.

**1950**
Approximately 115,000 mobile homes are recorded in the United States.

## Regulation and Zoning to 1970s 1980s




**1970s**
Federal changes to affordable housing programs lead to regulation of plumbing and electrical in mobile homes and HUD improving tenant and fire safety.

**1973**
The number of mobile homes in the U.S. rises to 5.3 million.

**1980s**
Mobile homes begin to be viewed as longer, more permanent manufactured homes, becoming the fastest-growing housing type in the country.

## Modern Era Redevelopment to 1990s NOW

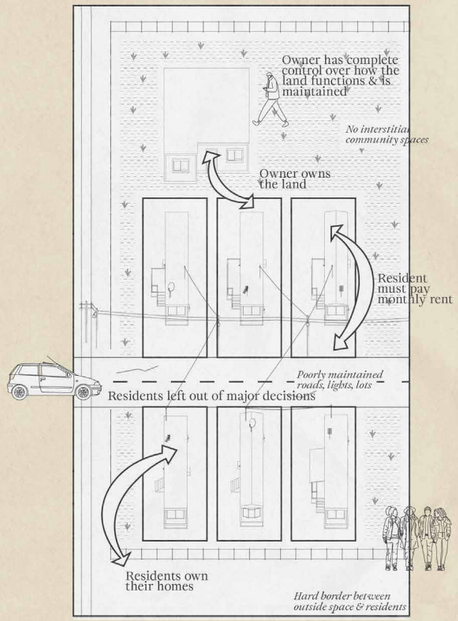

**1990s**
Mobile homes make up 66% of affordable housing in the U.S., accompanied by a push for improved park amenities.

**2008**
Following the financial crisis, mobile home parks face challenges due to zoning regulations, rising land values, and competition from private equity developers.

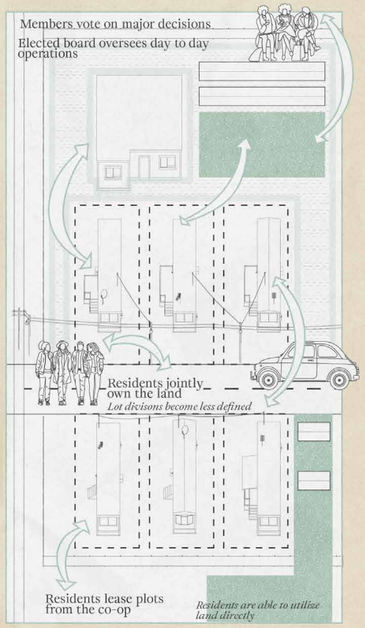
**Now**
A fight for ownership over land, and a call for collective ownership and living for a new generation.

# Rooted in Motion
*The Evolving Landscape of Manufactured & Mobile Home Communities*

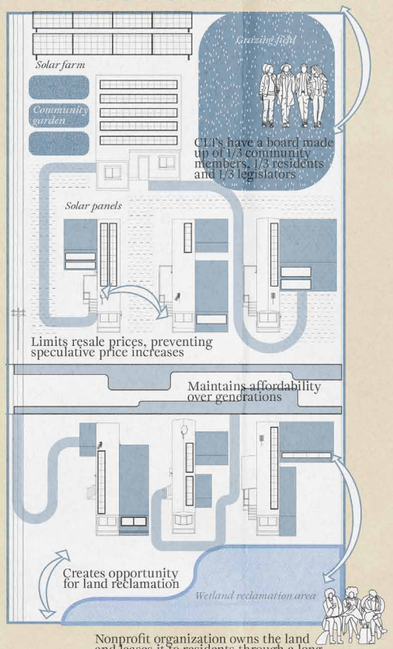
## 'Existing'




## 'Co-op Land Ownership'




## 'Community Land Trust + Incremental Build'





## CLT Operation through Urban Policy Change

### Acquisition and Preservation of Manufactured Home Parks

**01**

**Access to Public Funding and Grants**

Policies can create or expand funding streams like state grants, federal programs (e.g., HOME or CDBG funds), or tax credits dedicated to CLTs acquiring manufactured home parks. These funds can help CLTs compete with private investors who often prioritize profit over community stability.

**Local Policy Example:**

Cities or counties can establish loan funds or bond initiatives to support CLTs in purchasing parks when they are at risk of being sold to speculative buyers.

**Outcome:**

Ensures long-term affordability and prevents displacement of residents when parks are sold.

### Resident-Driven Governance and Ownership Models

**02**

**Right of First Refusal (ROFR) for Residents and CLTs**

Policies can require that when a manufactured home park is up for sale, residents (or an affiliated CLT) have the first right to purchase it. This ensures that residents can collectively secure the land through a CLT, preserving affordability and stability.

**Example Policy Framework:**

Similar ROFR laws exist in states like Vermont and Oregon for cooperatives, which can be adapted for CLT partnerships.

**Outcome:**

Empowers residents to take control of their living conditions while leveraging CLTs' expertise in long-term land management.

### Zoning and Land Use Policy Adjustments

**03**

**Inclusionary Zoning and CLT Preference**

Local governments can revise zoning codes to incentivize or require the development of new manufactured home parks under CLT stewardship. Zoning could offer density bonuses, expedited approvals, or tax abatements for CLTs managing these parks.

**Land Use Innovation:**

Encourage zoning overlays that specifically protect manufactured home parks from redevelopment unless converted into CLT-managed affordable housing.

**Outcome:**

Ensures that manufactured home parks are preserved as affordable housing options in perpetuity.

### Tax Benefits and Financial Incentives

**04**

**Property Tax Relief for CLT-Owned Parks**

Legislators can implement property tax exemptions or reductions for land owned by CLTs, recognizing their public benefit role. Reduced tax burdens enable CLTs to maintain affordable lot rents for residents.

**Local Policy Example:**

Governments can offer low-interest loans or tax-exempt bonds to CLTs for park acquisition and infrastructure improvements.

**Outcome:**

Helps maintain affordability by reducing operating costs for the CLT and thus lowering rents for residents.

### Infrastructure Improvement Support

**05**

**Public Infrastructure Grants and Partnerships**

Policies can allocate funds for infrastructure upgrades (water, sewer, roads) in CLT-managed parks, especially in rural or underserved areas. Partnerships with municipalities can provide cost-sharing for essential upgrades.

**Federal Alignment:**

Programs like USDA Rural Development loans or HUD funds can be tailored to support infrastructure in CLT-owned parks.

**Outcome:**

Ensures that residents live in safe, well-maintained communities without bearing the full financial burden.

### Education and Technical Assistance

**06**

**Support for Resident and CLT Capacity Building**

Policies can fund technical assistance programs to help residents and CLTs navigate the complexities of park acquisition, governance, and management.

**Example:**

Create partnerships with nonprofits or housing agencies to provide training on governance, legal issues, and financial management for CLTs and resident boards.

**Outcome:**

Strengthens resident leadership and ensures sustainable, resident-driven governance.

---

Organization: **MHAction**

Purpose: **Education & Advocacy**

Empowers residents of manufactured home communities to organize, advocate, and fight for their rights.

**Education**
**Leadership training**
**Support for issue driven campaigns**

Helps Protect Against:

**Rent hikes, poor maintenance, corporate abuses**

How Does MHAction Interact w CLTs:

**Helps organize and educate residents about the benefits of CLTs**

- Long term affordability & community control
- Advocate for public funding
- Negotiate with park owners to transfer land ownership
- Connects residents with partners, such as housing nonprofits
- Leadership training prepares residents to engage in the governance of CLTs

Check out MHA!

Check out ROC!

Helps Residents:

**Purchase the land beneath their homes**

How Does ROC USA Support CLTs:

**Leveraging its expertise in financing, organizing, and technical assistance**

- Facilitating the transition of land ownership to a nonprofit CLT so residents can retain ownership of their homes
- Provide loans to support land acquisition
- Certified Technical Assistance Providers guide residents in forming governance structures that align with CLT principles

Organization: **ROC USA**

Purpose: **Land Purchase & Facilitation**

**Financing**
**Training**
**Ongoing support**


Helps residents of manufactured home parks purchase the land beneath their homes, turning them into resident-owned communities.

*How can we reclaim the future of West Baltimore through art, culture, and community?*

# Threads of Healing

**NOMAS BGL Student Design Competition**

**Finalist, 4th Place**

**Awarded Honorable Mention**

**Contribution:** Research, Design, Visual Representation and Post Production, Model Fabrication
**West Baltimore, Maryland**
2024

Threads of Healing aims to give agency back to the Black community in West Baltimore by implementing community land trusts as collective ownership and affordable housing, and supplementing it with art, culture and green infrastructure to add communal value. Offering displaced residents, homes and small businesses a second chance through the CLT will allow for a pathway to connect a harrowed past to a bright future. This project also finds methods of healing the scars of West Baltimore due to the addition of the I-40 corridor. It serves as a testament to the community's efforts to enact meaningful change in their environment and memorializes the collective struggles and triumphs of its residents. By integrating elements that reflect the history and identity of the area, the project aims to restore and bring back what was once lost, transforming spaces of destruction into vibrant hubs of activity and engagement. This design not only honors the past but also creates a foundation for a sustainable future, empowering the community to thrive and grow together.

**1500** Residents Displaced

**843** Residents Reinstated

**971** Houses Destroyed

**271** Units Integrated

**1** School Demolished

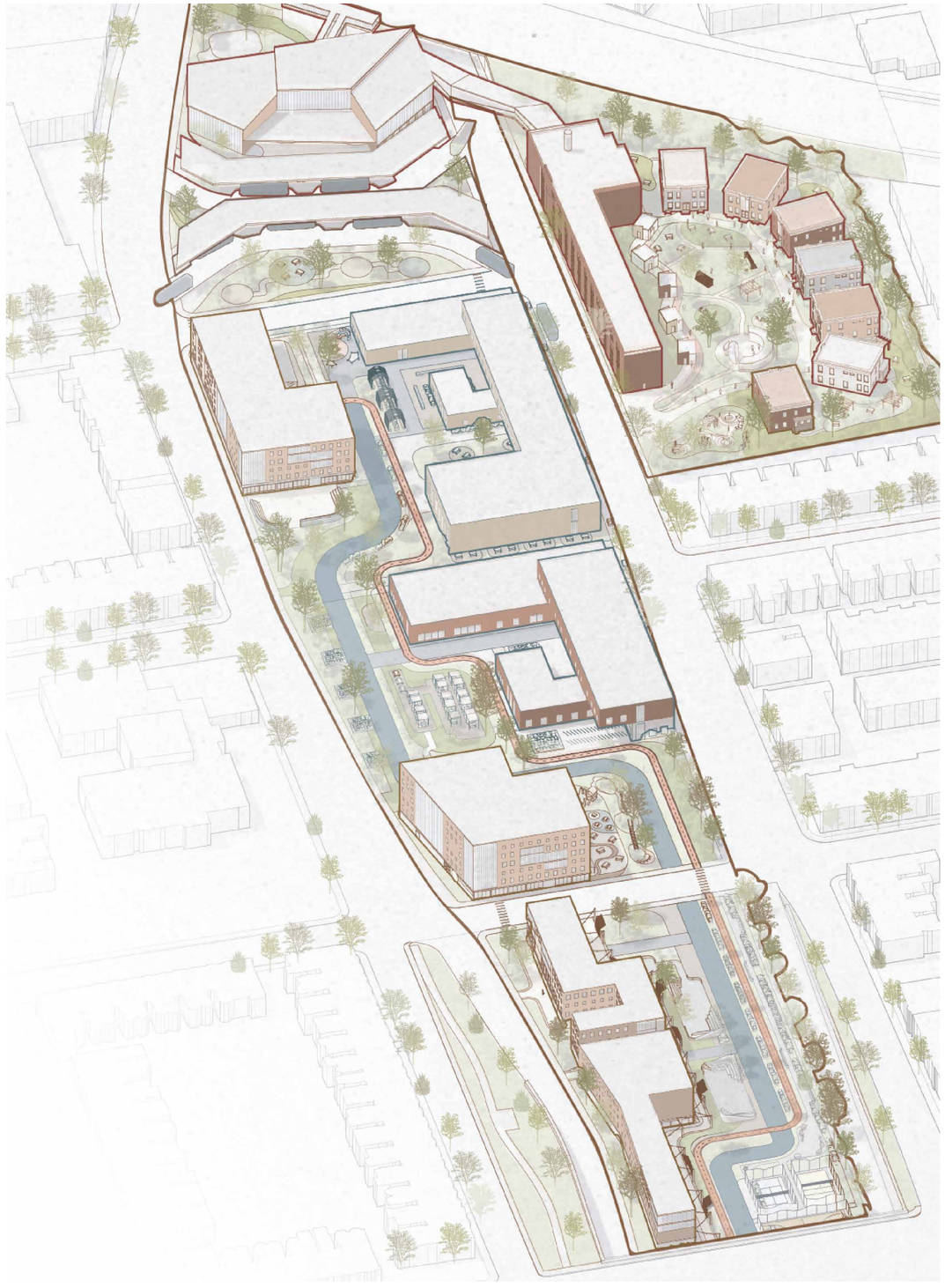
**1** School Revived

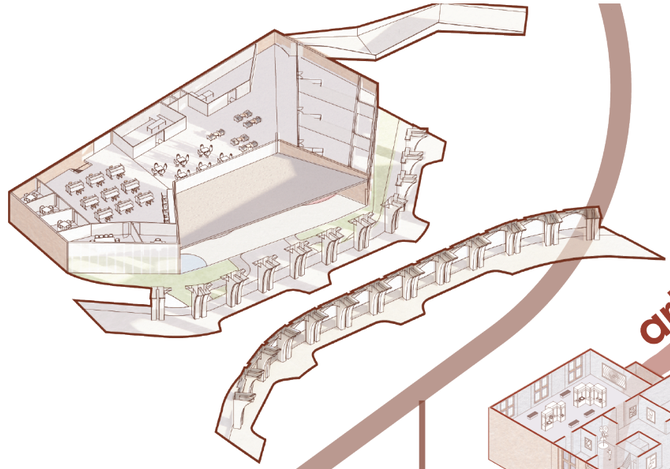
**62** Businesses Demolished

**31** Businesses Established

**8** Primarily Black Neighborhoods Affected

**1** Prominently Black Neighborhood Uplifted

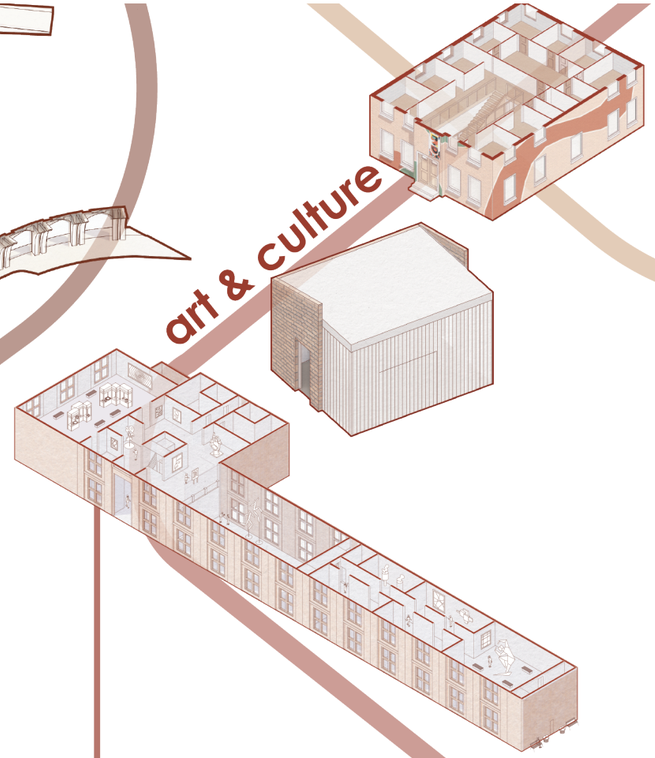




transit

## Transportation Hub

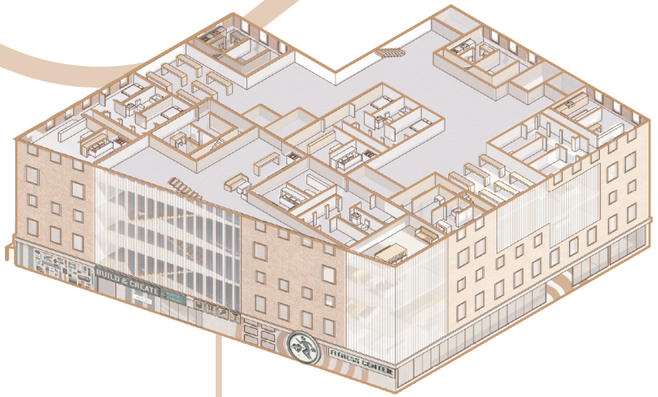
This junction promotes multimodal connectivity and adaptability to improve commuter comfort and bus drop-off efficiency.



art & culture

## Artist Residencies

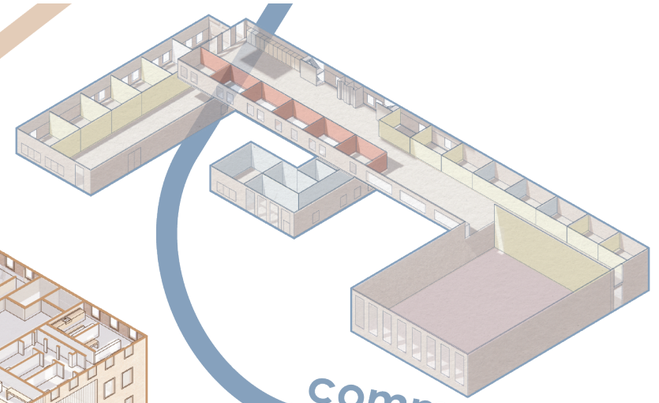
The artist residency program provides space and resources for artists across all disciplines to engage in creative development, experimentation, and collaboration.



housing

## Affordable Housing

This housing model emphasizes collective care, bottom-up living, and solidarity economy. By incorporating small businesses within the CLT revenue is generated for residents, fostering autonomy in homeownership while supporting local entrepreneurship.



community

## K-12 School

Providing education in an inclusive environment and offers a broad curriculum , extracurricular activities, and sensitive design to support holistic development.

Transit Hub

Artist Residencies

Interconnecting Pathways

Housing


## Tulip Poplar

**Liriodendron tulipifera**

Sequesters 60 pounds of CO2 per year

## Sweetgum

*Liquidambar styraciflua*

Sequesters 50 pounds of CO2 per year

## Eastern White Pine

*Pinus strobus*

Sequesters 55 pounds of CO2 per year

## 50% Greater Community Involvement

Community gardens and green spaces in West Baltimore have boosted local environmental involvement by 50%, **fostering ownership and pride in the neighborhood.**

## 5000-10000 Tons of CO2 Sequestered

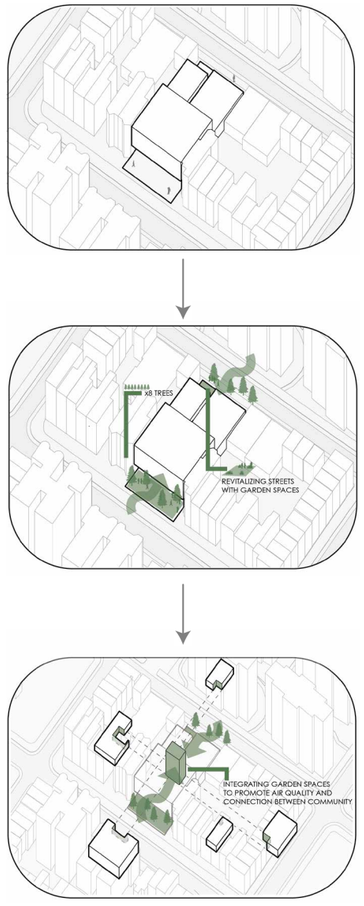
West Baltimore's tree canopy is around 20%, below the ideal 30%, and increasing it to this target could **sequester 5,000 to 10,000 tons of CO2 annually.**

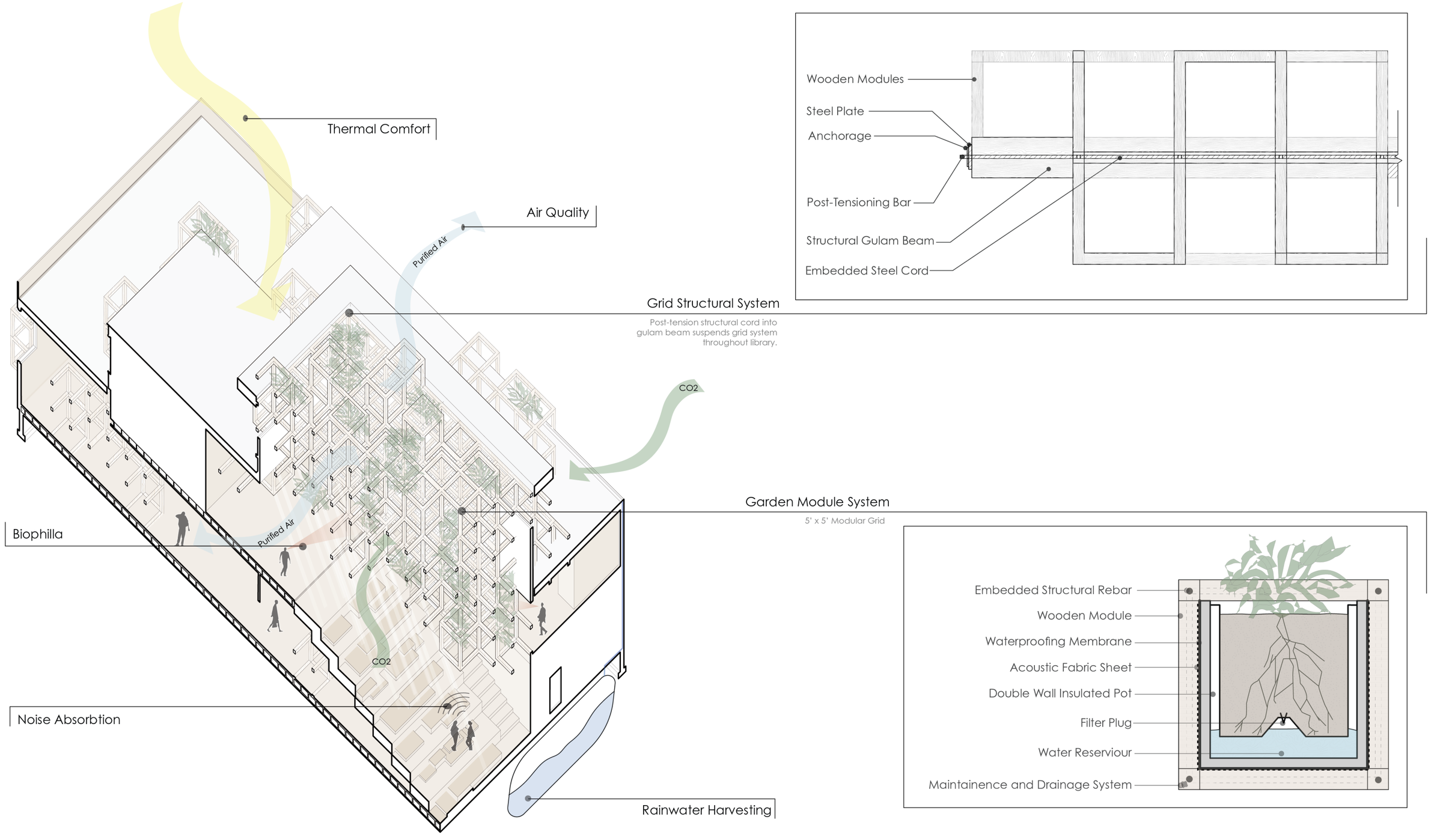
*How can biophilic design be used as a tool to enhance the experience of a space?*

# Clinton Hill Library

**Architectural Design Studio 7**
**Instructor:** Robert Cody
Individual
**Brooklyn, New York**
Fall 2023

This project proposes a new method and technology for controlling experiences throughout a library building. By exceeding Brooklyn street vitalization minimums through replanting trees and public gardens, as well as the introduction of interior planter modules into the library, this building strives to give back to the community on a multitude of levels. In the library, a 5' x 5' garden grid module has been designed as a major connection between all elements of the building. It not only appears all throughout the library by providing a way for inhabitants to see plants and light throughout the year, but it also informs and organizes the layout of the structure by conforming its modular 5' x 5' grid to the structural 25' x 25' grid. The use of planter modules allows for controlling the noise, light, temperature, air quality, and the general feeling of the inhabitants both inside this structure and throughout the surrounding community. The overall goal of this project is to provide a space for the surrounding community to be able to stop and take a breath.





Thermal Comfort
Air Quality
Purified Air
Grid Structural System
Post-tension structural cord into gulam beam suspends grid system throughout library.
CO2
Garden Module System
5' x 5' Modular Grid
Biophilla
Purified Air
CO2
Noise Absorbtion
Rainwater Harvesting


Wooden Modules
Steel Plate
Anchorage
Post-Tensioning Bar
Structural Gulam Beam
Embedded Steel Cord

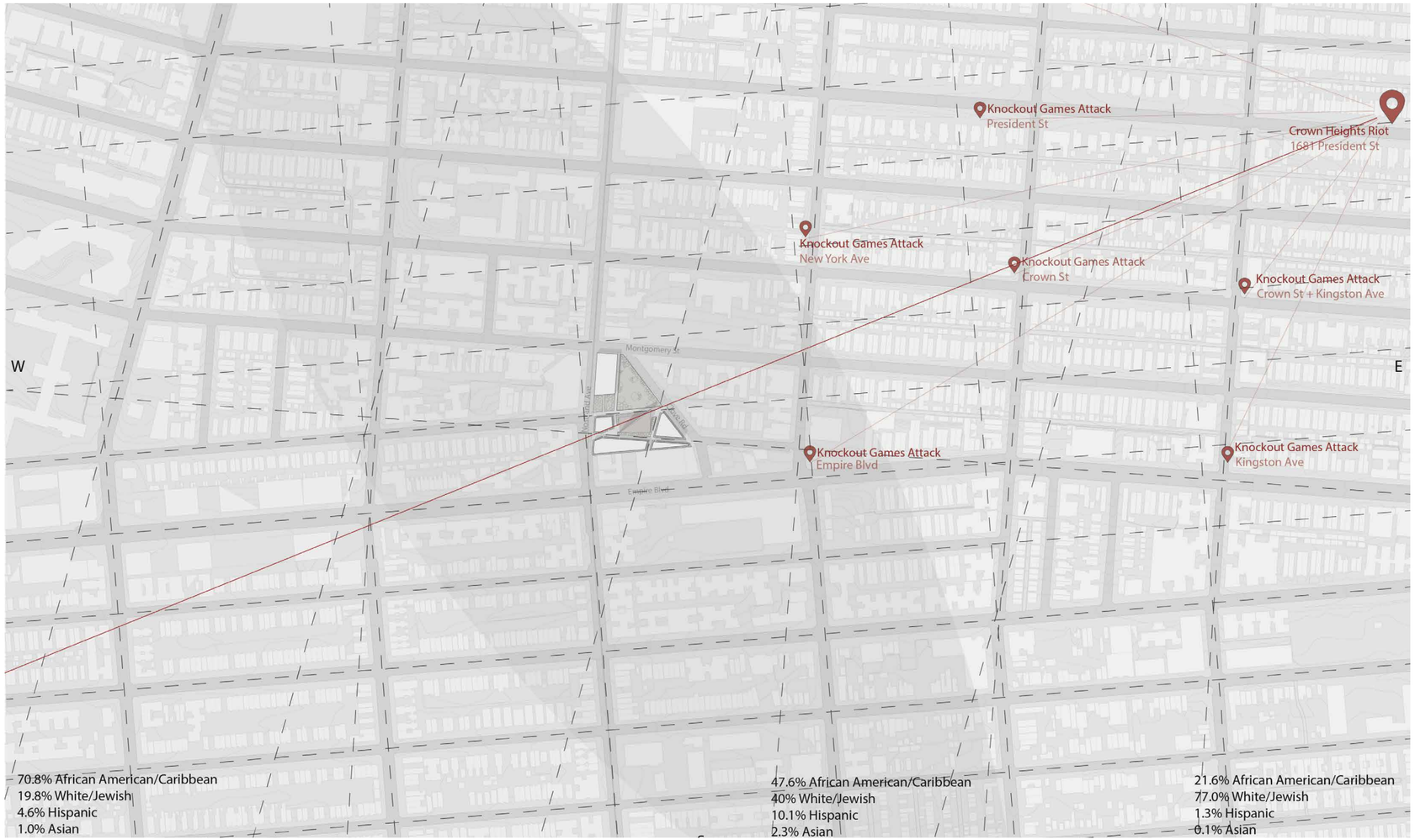

Embedded Structural Rebar
Wooden Module
Waterproofing Membrane
Acoustic Fabric Sheet
Double Wall Insulated Pot
Filter Plug
Water Reserviour
Maintainence and Drainage System

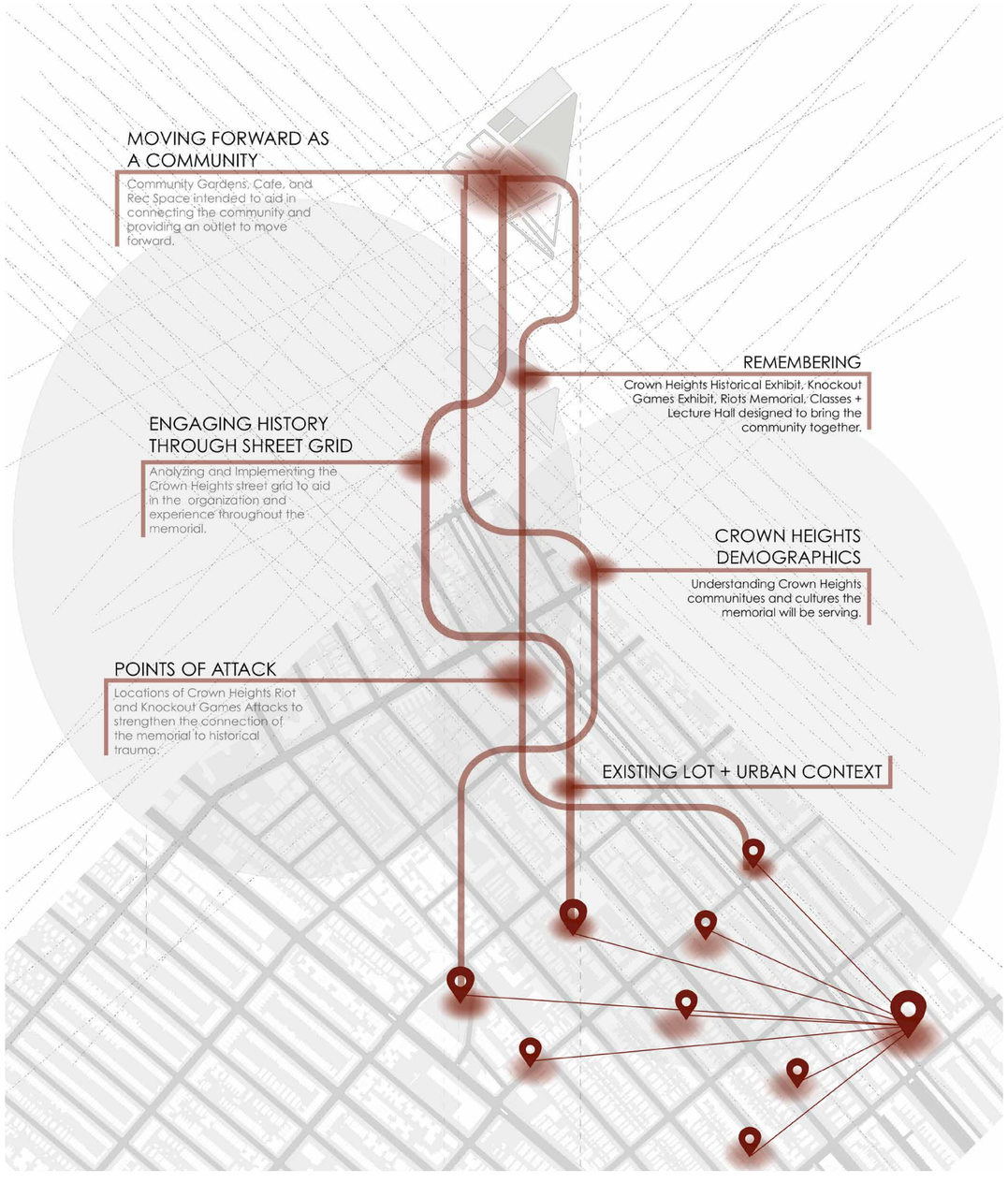
*How can design promote cultural learning and exchange through shared trauma?*

# Collision on President Street

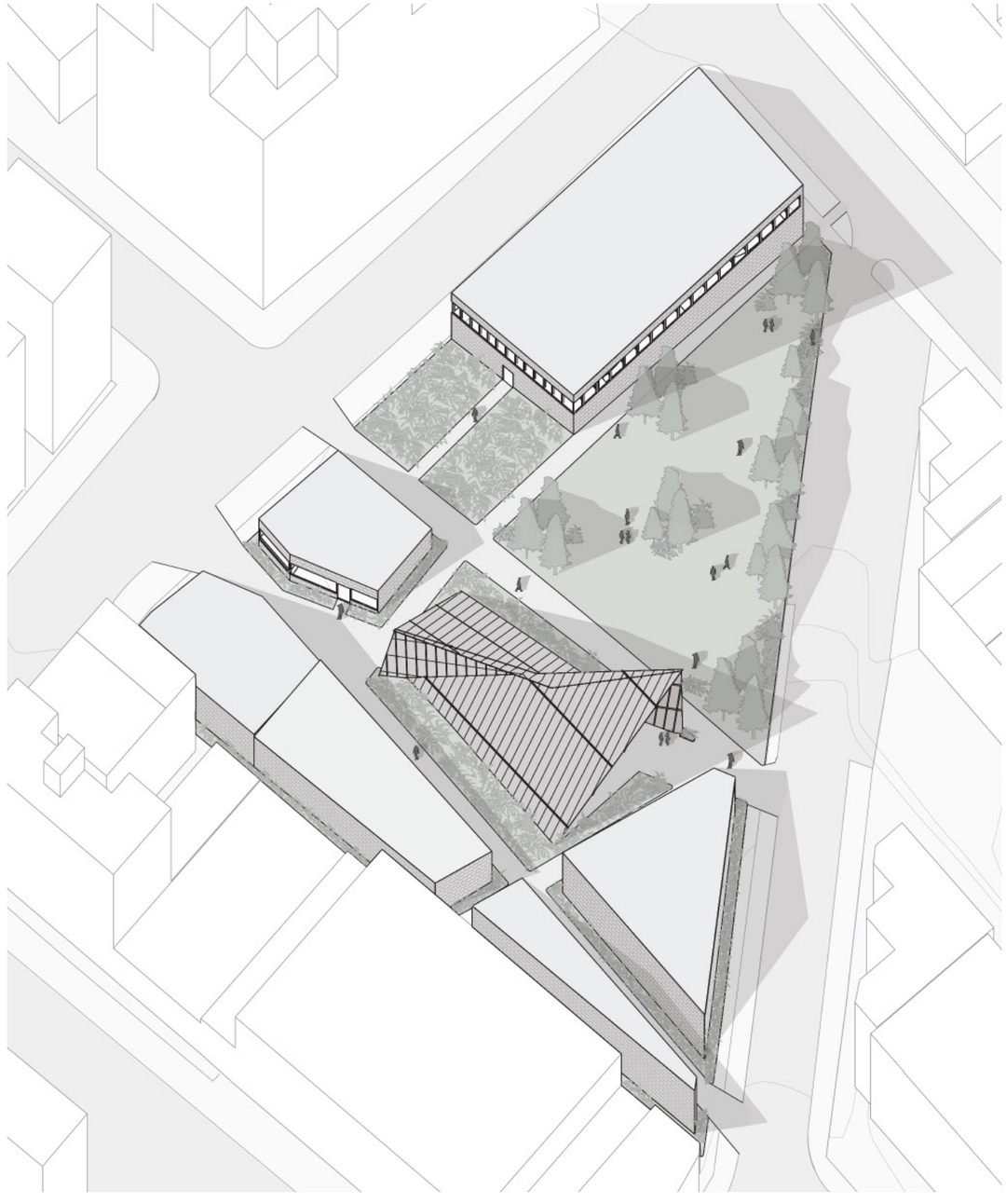
**Architectural Design Studio 5**
**Instructor:** Edgar Papazian
Individual
**Crown Heights, NY**
Spring 2023

Crown Heights has been diverse throughout history. In the early 1900s, it was home to Irish, Russian, Italian, and Jewish immigrants. By the mid-1900s, many white immigrants moved to suburbs, leaving the African American and Jewish communities to grow in Crown Heights. Despite sharing the area, these groups have had tensions, highlighted by the Crown Heights Riots of 1991 and the "Knockout Games" of 2013, which resulted in loss for both communities. In order to move forward together there is no doubt that these traumatic events need to be addressed and remembered. Analyzing demographics, history, and street grid layout, the design will reflect the traumatic events and promote reconciliation. The memorial will feature a pavilion pointing to the 1991 accident site, with structures that echo the collision, and a sunken design to foster reflection and unity.






Synthesizing research and data analysis to develop innovative, context-sensitive design solutions that address urban challenges and enhance the built environment.



A memorial informed by in-depth research and community input, aimed at honoring local heritage and fostering a sense of unity and healing.

*How can a city reconnect to its river through the paradigmatic infrastructural decking of a highway?*

# Fastscape & Slowscape

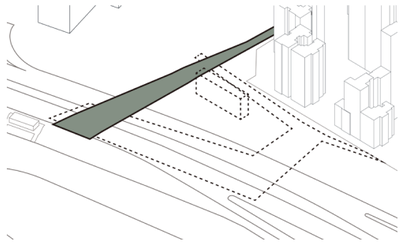
**Banpo-Hangang River Connection Competition**

**Phase 2 Finalist : 3rd Place**

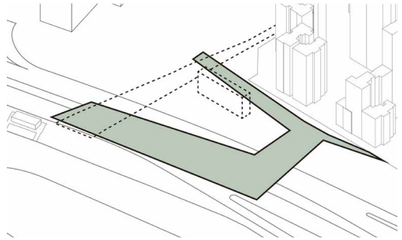
**Team:** Architecture & Urban Design : MMK+, Strange Works Studio, Emergent Studio
**Role:** Emergent Studio Design Intern
**Contribution:** Design Studies, Visual Representation, Post Production
**Seoul , South Korea**
2024

Fastcape-Slowscape explores Seoul's dual urban narratives: the structured urban grid and the meandering ecological landscapes. It aims to reconnect the city to its river by transforming the Olympic-daero highway into two distinct experiences. The Fastscape offers a quick route from SinBanpo-ro to the Hangang riverfront, catering to visitors and tourists with a focus on speed and view. The Slowscape, on the other hand, provides a more relaxed and immersive experience for residents, featuring diverse ecologies and meandering pathways. Both areas converge at a new cultural building that integrates the historic 108 building, creating a space that bridges fast-paced and contemplative urban experiences.

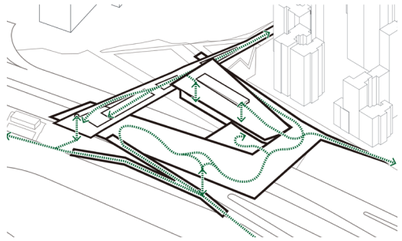
The project is a place **to view** and **be viewed.**



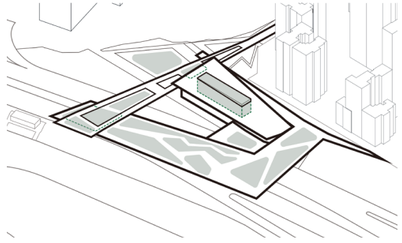
Fastscape



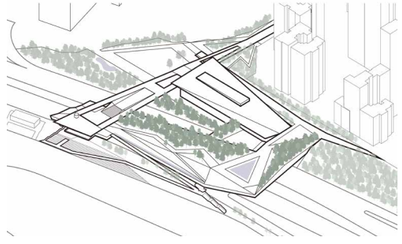
Slowscape



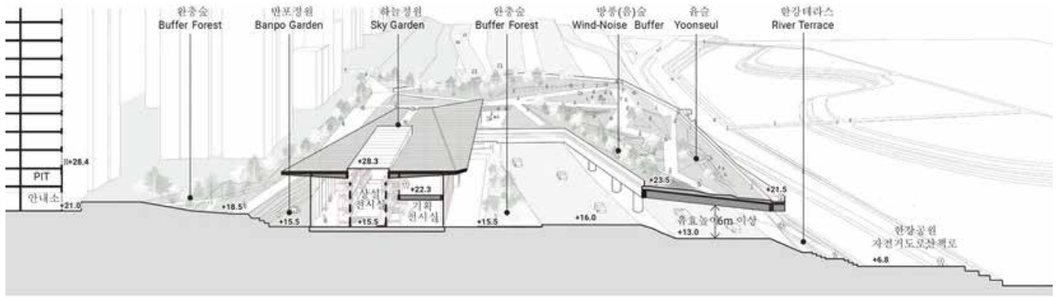
Connection

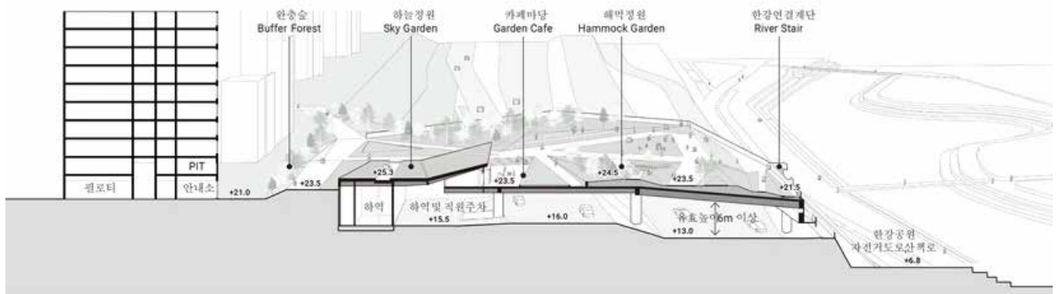


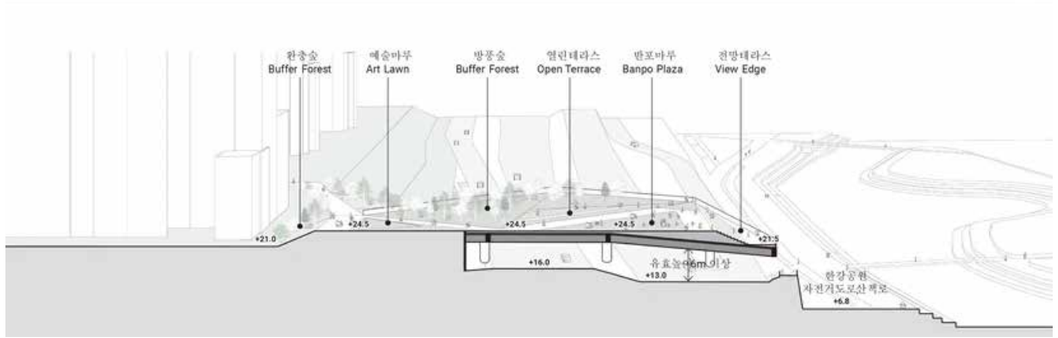
Open Space + Place Making

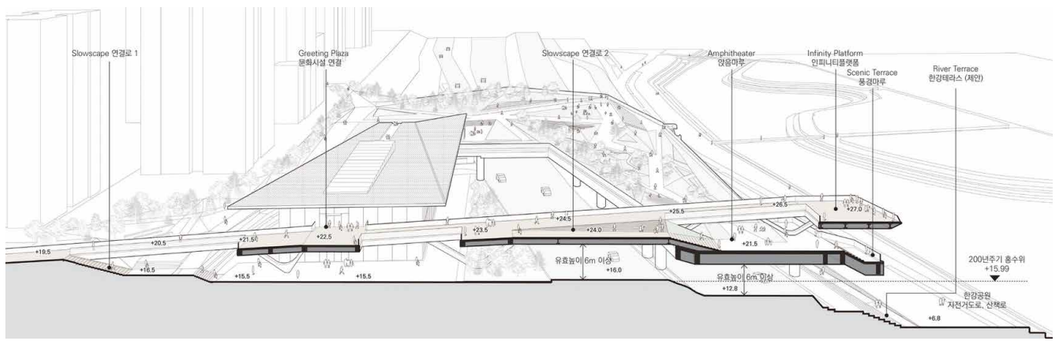


Enviornmental Integration

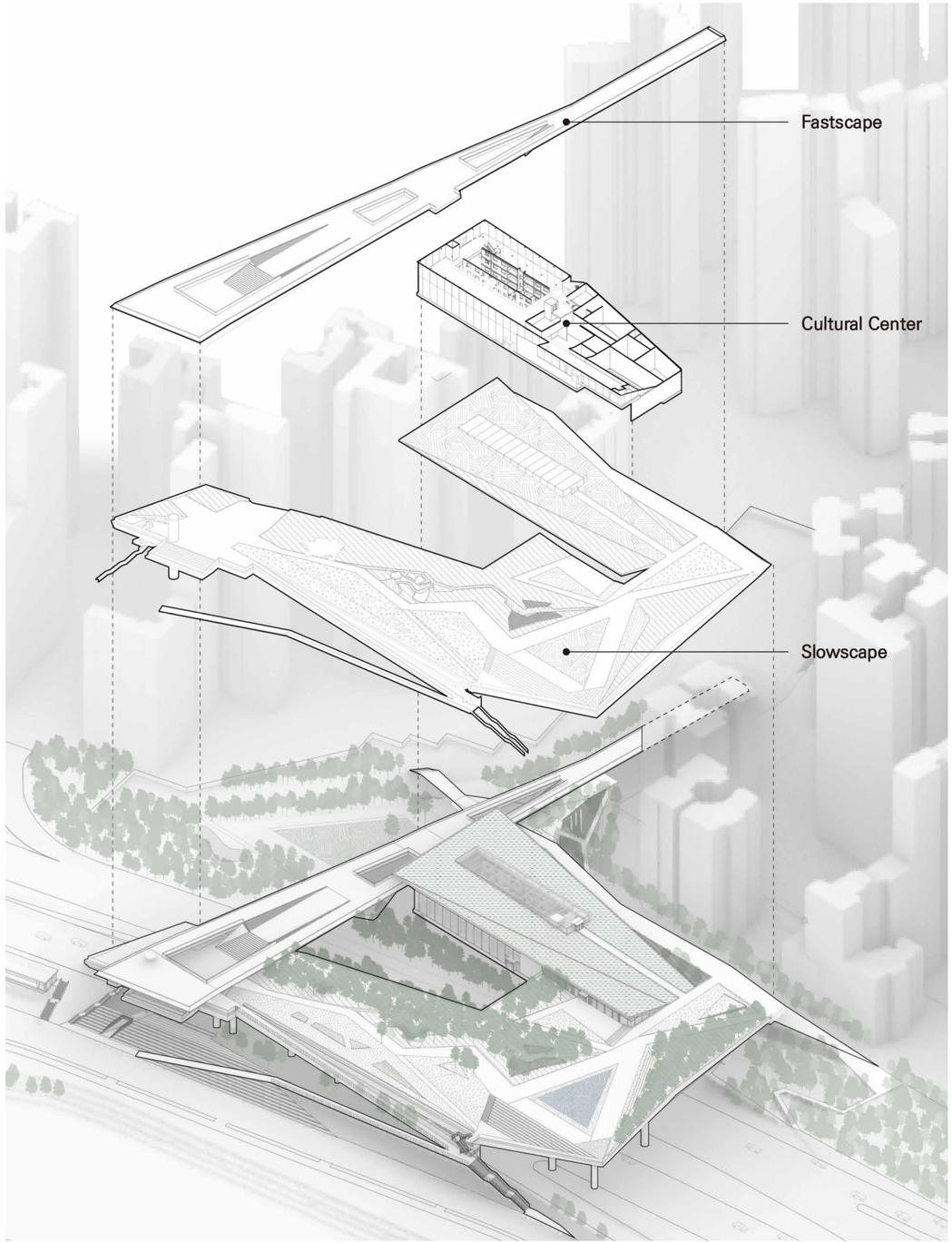



Section details used to design **diverse spatial experiences** emphasizing the difference between slow and fast speeds of movement - stacking vertically and framing views at key moments of sectional intersection in the new deck-park.




A layered design that seamlessly integrates diverse programmatic elements, varying speeds of movement, and a deep connection to the history and culture of the city

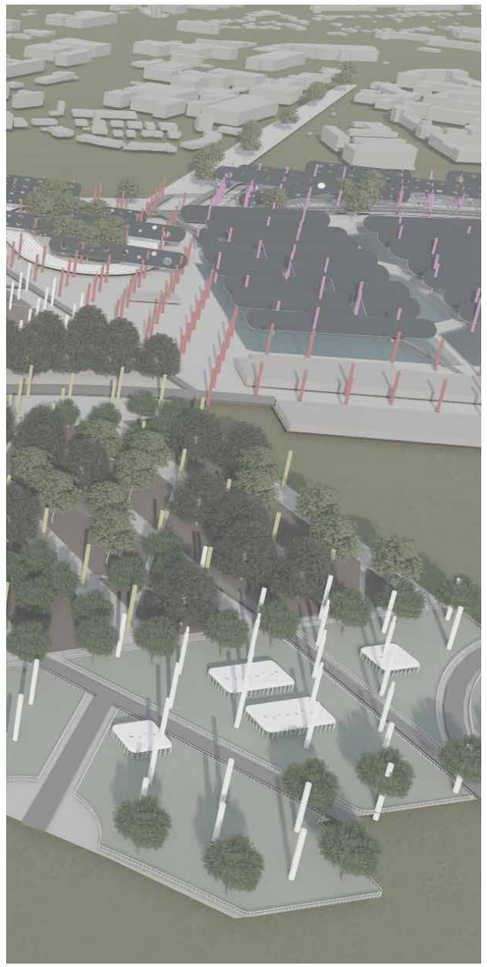
*How can community-based design foster synergies between energy production, ecology, and the economy?*

# Productive Frictions: E3

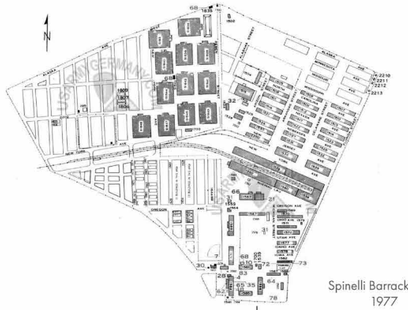
**LAGI 2022 Competition**

**Team:** Dongsei Kim, Elise Park
**Contribution:** Energy Calculation Research, Modular Design, Digital Representation and Post Production
**Mannhiem, Germany**
**Architectural Research Assistant**
2022

Productive Frictions: E3 is a green energy park in Mannheim, built on the former Spinelli Barracks site. Designed to reflect the barracks' historical map, the park focuses on ecology, energy production, and storage. It features 838 multifunctional poles and 31 large solar panels generating about 350 MWh annually. The park's western end includes carbon-sequestering trees, community gardens, and animal therapy areas. The E3 poles produce energy and sequester carbon, while the solar panels provide electricity and shade. Excess energy is stored using Closed Pumped Storage Hydropower (PSH) technology, making the park a significant contributor to renewable energy efforts in the surrounding city.



US presence in Mannheim begins
1945



Spinelli Barracks map
1977

Mannheim Messenger
1981

Mannheim Messenger
1982

The Mannheim Messenger was a military newspaper that was published to update the barracks, including Spinelli, Mannheim on the military. Special happenings from the lives of the soldiers and leaders were reported in the Mannheim Messenger.

1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000

Extent of US occupation at Spinelli Barracks

Spinelli Barracks is created and occupied following end of WWII.

Layout of the barracks -organizational hierarchy similar to Mannheim as a whole.

Twelve controlled humidity warehouses on Spinelli Barracks
1971

Combat Equipment Group Europe (CEGE) Headquarters
Early 1980s

CEGE's mission in those days was to store, maintain, and issue equipment to units from the continental United States (CONUS) deploying in support of the European General Defense Plan (GDP). This plan was tested annually during Return of Forces to Germany (REFORGER) exercises.

51st Maintenance Battalion
1981

The 51st Maintenance Battalion was responsible for providing direct support maintenance to US Army units located along the Rhine River Valley between Karlsruhe and Mainz. It moved to Spinelli Barracks in 1981.

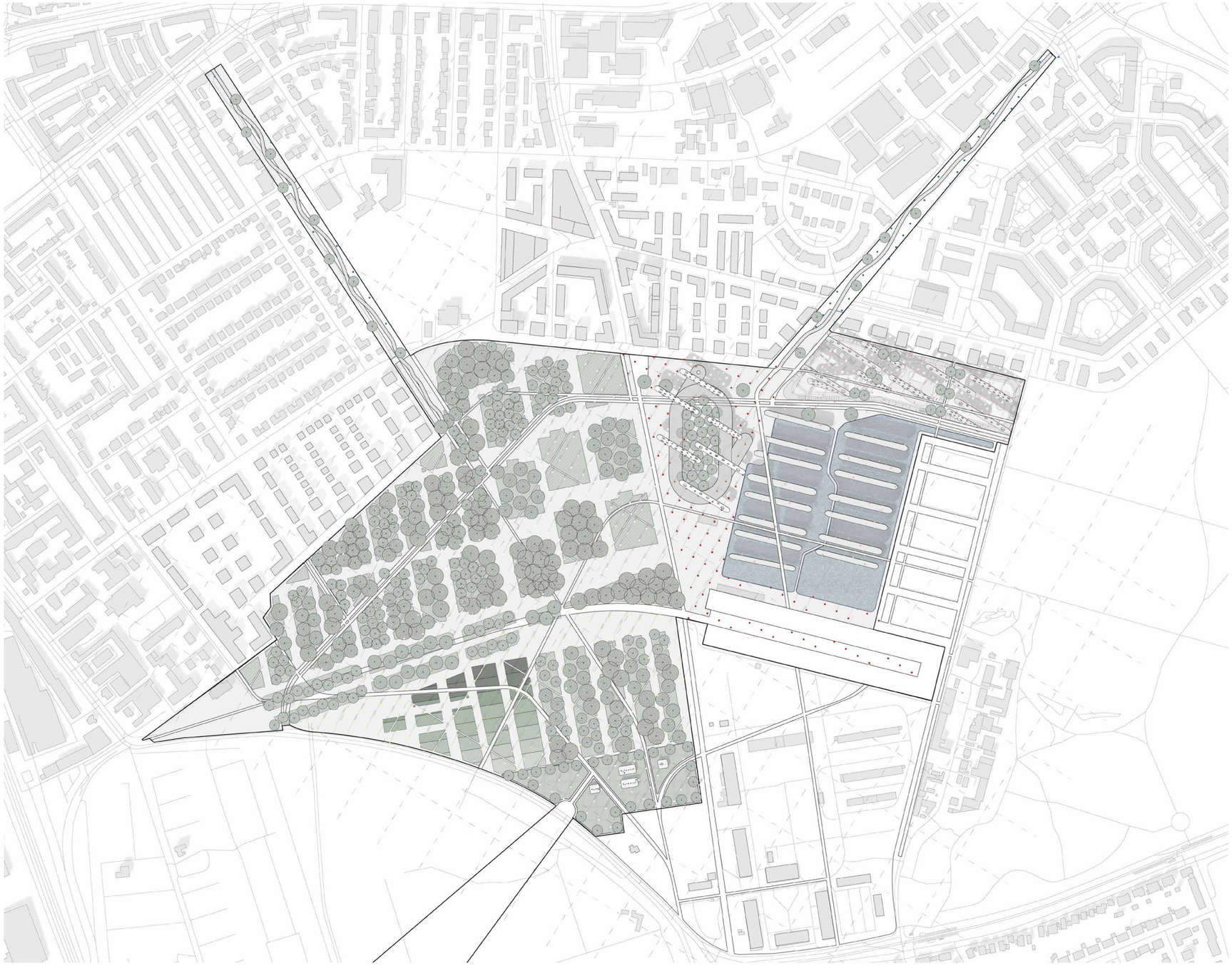
US Presence in Mannheim
*Map*

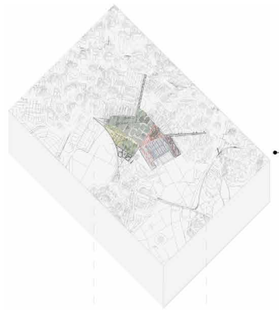
Funari Barracks
1977

Hammonds Barracks
1977

Taylor Barracks
1977

***Spinelli Barracks***
*Mannheim, Germany*
*Kaefertal District*



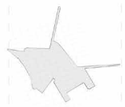


**Productive E3**
Energy / Ecology / Economy
producing socio-economic infrastructure

**Storing Energy**
Pumped Storage Hydropower (PSH)
with water based leisure activities

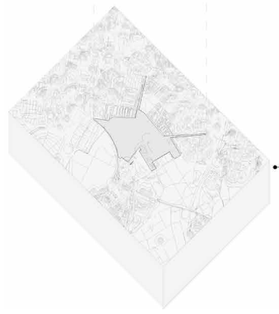
**Producing Energy**
E3 Energy Towers
Piezo Paths
PV Panels
(Running tracks / bike paths / BMX paths
+ skate park)

**Engaging Ecology**
Carbon Sequestrian trees & E3 Poles
Comunnity Gardens
Tree Nursery
Animal Therapy



**Engaging Human Scale**
Engaging the human scale through
Mannhiem's historical city grid

**Engaging History**
Acknoledging site's history by
tracing the American Spinelli
Barracks' building footprints



**Existing Grounds**
**+ Urban Context**

The annual capacity of the overall park would be around 8,500 MWh +. This amount can power about 343 households that consume 25kWh per day.

## CARBON SEQUESTRATION

A tree must live 10 to 20 years to have a meaningful effect on the environment.

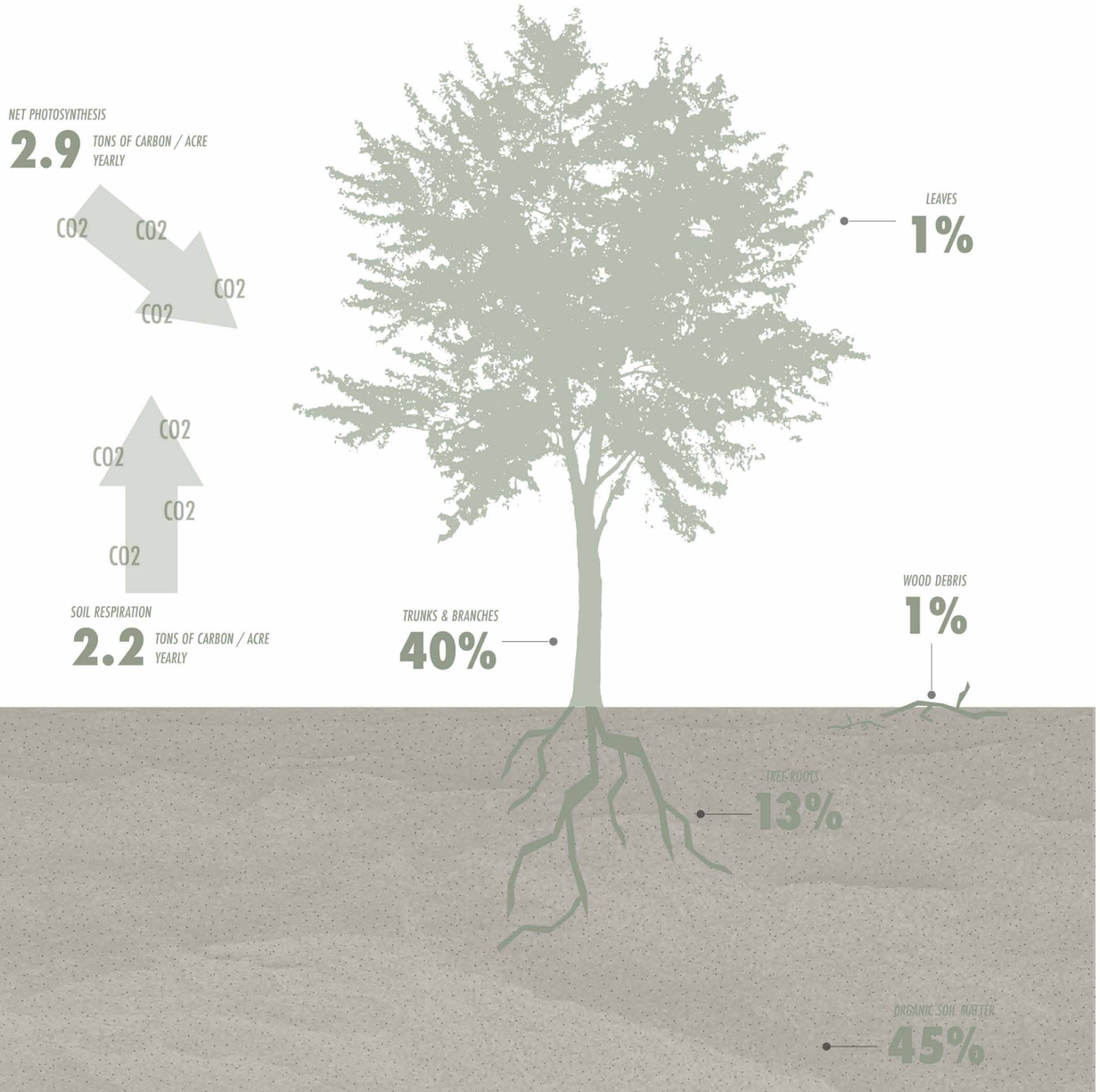
Medium growth trees absorb more carbon than fast growing, short lived trees.

Deciduous trees can screen 70 to 90 percent of summer sun. Communities with well-shaded streets can be 6 to 10 degrees cooler, which reduces the heat-island effect and local energy needs.

Trees that have wide crowns and large leaves engage in more photosynthesis than others.

Trees that grow quickly absorb more carbon and store it faster within their first few decades of life.

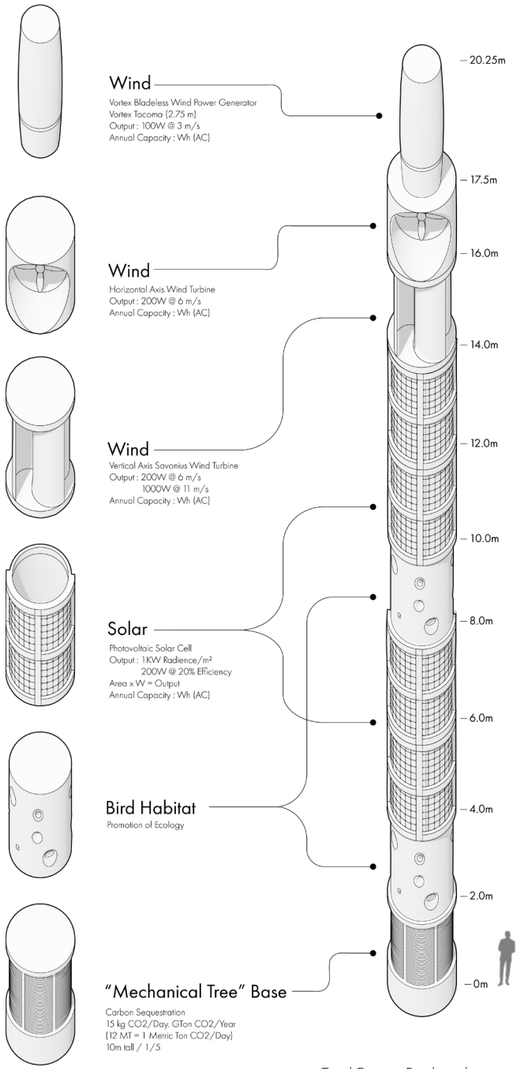
Turning trees into lumber instead of leaving them to the elements prevents them from decomposing, which adds some carbon to the atmosphere.




**Carbon Sequestrian Trees** + E³ Poles [B. Bird Habitat Module] (Live Oak, London Plane, & Chestnut for Zone 8b: -9.4°C to -6.7°C)

**Animal Therapy** Animal waste feeds two underground biodigesters (250 m³ each) + E³ Poles [B. Bird Habitat]

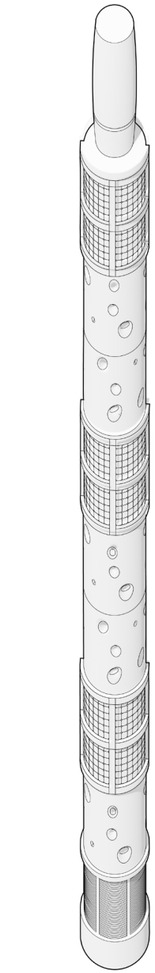
## E3 Towers (Energy/Ecology/Economy)



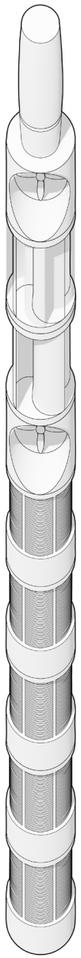
Modules



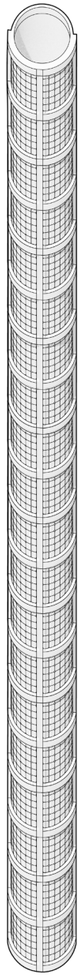

Total Energy Produced :
A:Standard Modular System



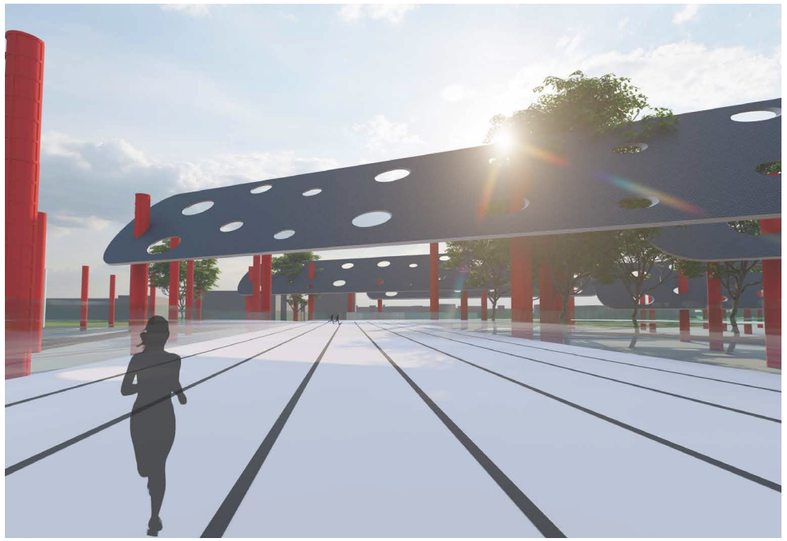
Total Energy Produced :
B:Bird Habitat Modular System



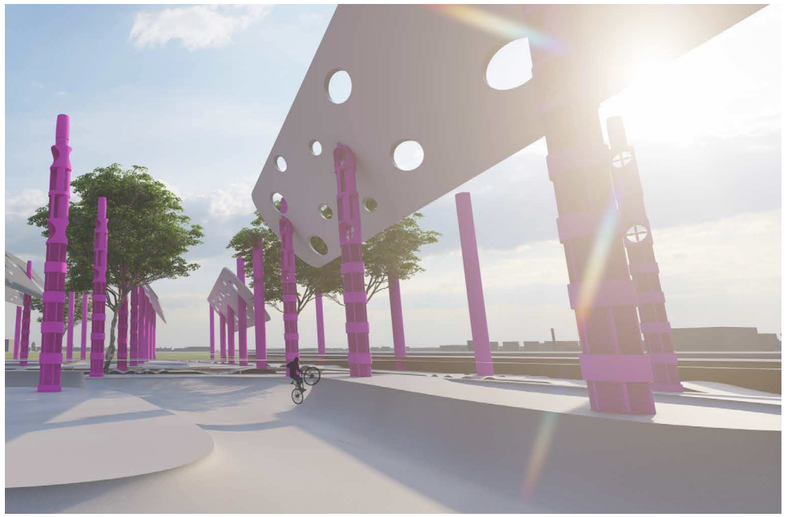
Total Energy Produced :
C.Wind Energy Production System



Total Energy Produced :
D.Solar Energy Production System



**Running Track** + E³ Poles [D. Solar Module] + **PV Panel Canopies**

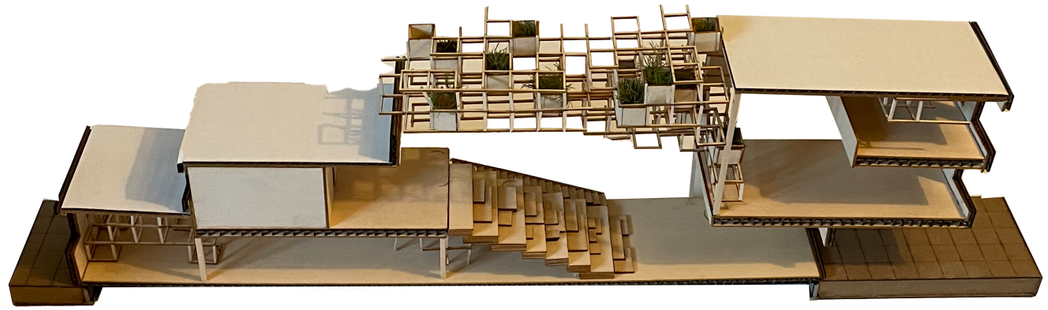


**Skate Park & BMX Path +** E³ Poles [C. Wind Energy Module] + **PV Panel Canopies**

*How can physical fabrication be used to communicate ideas to a wider audience?*

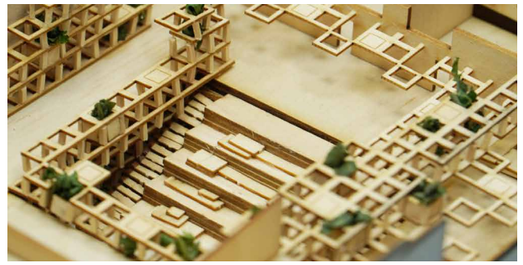
# Physical Fabrication

Physical Fabrication is a powerful tool for addressing urban challenges while pushing the boundaries of creativity and problem-solving. Through modeling, designers can better understand how a space functions and how it interacts with its environment, providing a deeper, more detailed perspective on a design's impact. As urban planning continues to evolve, communicating complex spatial ideas to a broader audience becomes increasingly important. My experience as a fabrication lab assistant has allowed me to leverage tools like laser cutters, 3D printers, CNC machines, and hand modeling to turn abstract concepts into tangible, interactive models. These physical representations are not only essential for refining designs but also act as clear, accessible ways to communicate complex ideas to the public, stakeholders, and community members. By making abstract urban planning concepts more relatable and understandable, physical fabrication helps bridge the gap between technical design and community engagement. The following series of models, created throughout my undergraduate career, demonstrates how physical fabrication can be a powerful method to communicate architectural and urban planning solutions, making them more comprehensible and impactful for a wider audience.



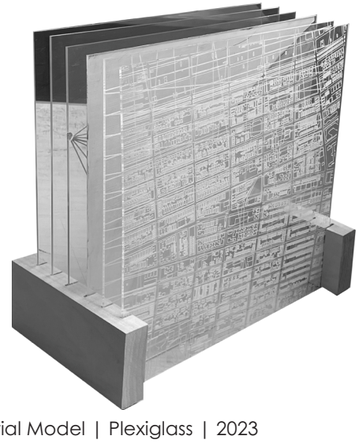
Basswood | Chipboard | Lasercut | Scale 1/8" = 1' | 2023

Basswood | Lasercut | Scale 1/8" = 1' | 2023



Basswood | Lasercut | Scale 1/16" = 1' | 2023

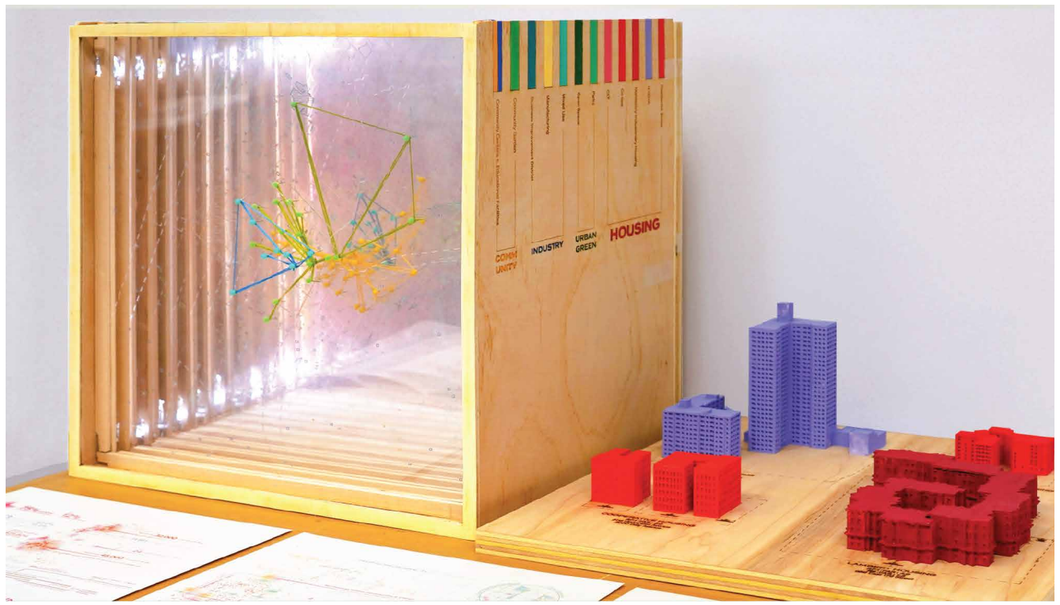
Typological Model | PLA | 3D Print | 2024



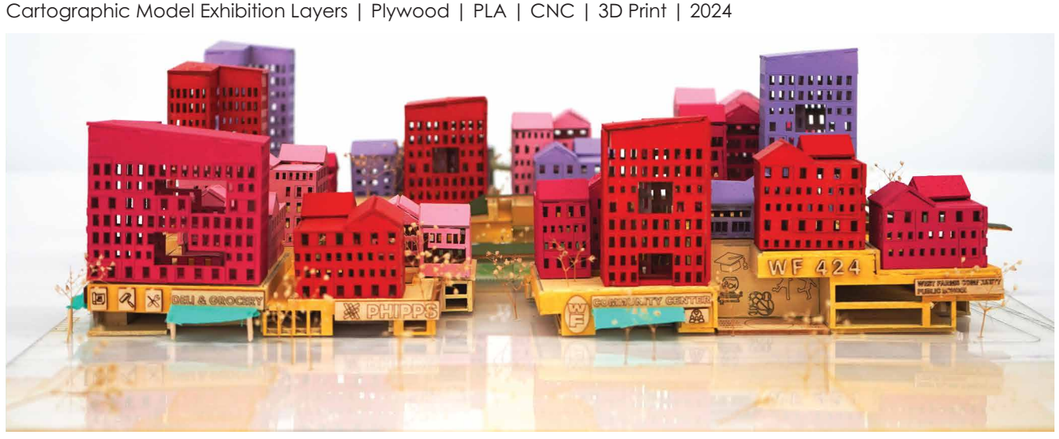
Geospatial Model | Plexiglass | 2023

Typological Model | PLA | 3D Print | 2024






Cartographic Model Exhibition Layers | Plywood | PLA | CNC | 3D Print | 2024

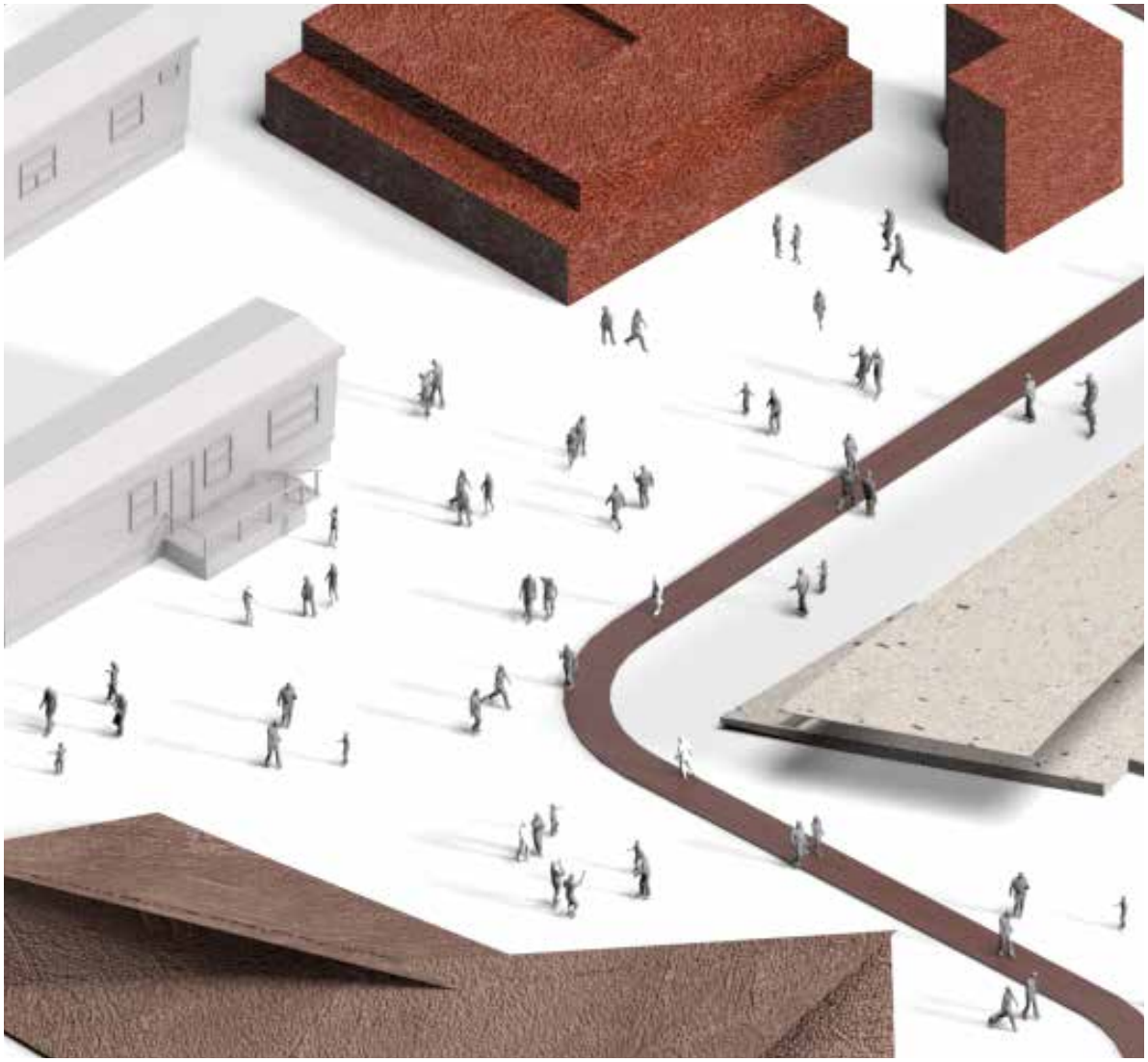



Block Scale Model | Basswood | Plexiglass | Lasercut | 2024

Plywood | Plexiglass | String | CNC | 2024


Plexiglass | PLA | 3D Print | Lasercut | 2024

# thank you!



631-372-4532 | **2024** | keastwood619@gmail.com